

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:07:01 ; Search time 39.4564 Seconds
(without alignments)
1198.803 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRHRLLLRLYLVA.....SSKATTMSSEDFKTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 1107863

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A Geneseq_19Jun03.*

- 1: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
- 2: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
- 3: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*
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- 11: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1990.DAT.*
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- 14: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1993.DAT.*
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- 21: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*
- 22: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
- 23: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
- 24: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1518	99.8	298	19	Secreted protein e
2	1518	99.8	298	22	Human functional a
3	1518	99.8	298	22	Human polypeptide
4	1517	99.7	298	19	Human secreted pro
5	1517	99.7	298	23	Human gene 25 enco
6	1517	99.7	298	23	Human gene 25 enco
7	1517	99.7	298	24	Human secreted pro
8	1517	99.7	298	24	Human secreted pro
9	1517	99.7	298	24	Human gene 162 enc

10	1514	99.5	298	24	AAO16452	Human functional a
11	1502.5	98.8	303	22	AAW23693	Human EST encoded
12	1465	96.3	312	20	AAW08060	Human PRO245 prote
13	1465	96.3	312	20	AAW23324	A33 related antige
14	1465	96.3	312	20	AAW13354	Amino acid sequenc
15	1465	96.3	312	21	AAW33421	Human PRO245 prote
16	1465	96.3	312	21	AAW24401	Human PRO245 prote
17	1465	96.3	312	21	AAW70668	Human PRO245 prote
18	1465	96.3	312	22	AAU12339	Human PRO245 polyp
19	1465	96.3	312	22	AAU00821	Human immune respo
20	1465	96.3	312	22	AAW80222	Human PRO245 prote
21	1465	96.3	312	22	AAW53081	Human angiogenesis
22	1465	96.3	312	24	ABU69632	Novel human secret
23	1465	96.3	312	24	ABU71455	Human PRO polypept
24	1465	96.3	312	24	ABU71901	Human secreted/tra
25	1465	96.3	312	24	ABU67738	Human A-33 related
26	1465	96.3	312	24	ABU66737	Human PRO polypept
27	1465	96.3	312	24	ABU67013	Human secreted/tra
28	1465	96.3	312	24	ABU67355	Human secreted pro
29	1465	96.3	312	24	ABU59818	Novel secreted and
30	1465	96.3	312	24	ABU64509	Human secreted/tra
31	1465	96.3	312	24	ABU54357	Human secreted/tra
32	1459	95.9	312	22	AAW50904	Human PRO245 prote
33	1242.5	81.7	388	22	ABG22341	Novel human diagno
34	1184	77.8	298	21	AAW27273	Human confluency r
35	1184	77.8	298	21	AAW27275	Murine confluency
36	1143	75.1	222	22	AAW41947	Human polypeptide
37	1106	72.7	215	22	AAW70500	Angiogenesis prote
38	1092	71.8	213	21	AAW27277	Human confluency r
39	702.5	46.2	140	22	AAW22338	Novel human diagno
40	547	36.0	107	22	AAW40161	Human polypeptide
41	498	32.7	310	21	AAW27272	Human confluency r
42	498	32.7	310	21	AAW27278	Murine confluency
43	482	31.7	310	24	AAO16453	Human functional a
44	481	31.6	310	21	AAW27276	Human confluency r
45	481	31.6	310	21	AAW33457	Human PRO1868 prot

ALIGNMENTS

RESULT 1

AAW85457

ID AAW85457 standard; Protein; 298 AA.

XX AAW85457;

AC AAW85457;

DT 25-FEB-1999 (first entry)

XX Secreted protein encoded by clone ct864_4.

XX Secreted protein; nutritional activity; immune stimulating; vaccine;

XX Suppressing activity; haematopoiesis regulating activity;

XX Tissue growth activity; activin; inhibin activity; chemotaxis;

XX Chemokinetic activity; haemostasis; thrombolytic activity; receptor;

XX Ligand; anti-inflammatory; cadherin; tumour invasion suppressor;

XX Tumour inhibition; gene therapy.

OS Homo sapiens.

XX

XX

PN WO9842739-A2.

XX

PD 01-OCT-1998.

XX

XX

PF 20-MAR-1998; 98WO-US05653.

XX

XX

PR 19-MAR-1998; 98US-0044466.

XX

XX

XX 21-MAR-1997; 97US-0822167.

XX

PA (GENY) GENETICS INST INC.

XX

XX Agostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;

PI Racie LA, Spaulding V, Treacy M;

bed date

XX WPI: 1998-609890/51.
 XX N-PSDB; AAV82780.
 XX New polynucleotides encoding secreted human proteins - derived from
 PT human foetal brain, adult brain, foetal kidney, placenta or adult
 PT pineal gland cDNA libraries.
 XX
 XX Claim 17; Page 73-74; 113pp; English.
 XX
 CC The present sequence represents a secreted protein. The polynucleotide
 CC and secreted protein are predicted to have biological activities which
 CC would make them suitable for treating, preventing or ameliorating medical
 CC conditions in humans and animals, although no supporting data is given.
 CC Suggested activities include nutritional activity, immune stimulating
 CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
 CC activity, tissue growth activity, activin/inhibin activity,
 CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
 CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
 CC invasion suppressor activity, and tumour inhibition activity (no data is
 CC given in the specification to support these activities). The
 CC polynucleotide is also stated to be useful for gene therapy.
 XX
 SQ Sequence 298 AA;
 Query Match 99.8%; Score 1518; DB 19; Length 298;
 Best Local Similarity 99.3%; Pred. No. 1.1e-118;
 Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MARRSRHRLLLRLRYLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTYSR 60
 DB 1 MARRSRHRLLLRLRYLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTYSR 60
 QY 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
 DB 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
 QY 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
 DB 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
 QY 181 LGSQSTNSSYTMNTKTGTLQFNVTVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGI 240
 DB 181 LGSQSTNSSYTMNTKTGTLQFNVTVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGI 240
 QY 241 IAAVWVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 DB 241 IAAVWVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 RESULT 2
 AAU00512
 ID AAU00512 standard; Protein; 298 AA.
 XX
 AC AAU00512;
 XX
 DT 09-MAY-2001 (first entry)
 XX
 DE Human junctional adhesion protein (JAM2).
 XX
 KW Junctional adhesion protein; JAM2; cellular localisation;
 KW cellular expression; immunoprecipitation; stroke; phosphorylation;
 KW glycosylation; paracellular migration; inflammation; disease;
 KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
 KW Crohn's disease.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1..20
 FT /note= "Possible signal peptide #1"
 FT Peptide 1..28
 FT /note= "Possible signal peptide #2"

FT Protein 21..298
 FT /note= "Possible mature JAM2 #1"
 FT Protein 29..298
 FT /note= "Possible mature JAM2 #2"
 FT Domain 237..254
 FT /note= "Transmembrane domain"
 XX
 PN W0200114404-A1.
 XX
 XX 01-MAR-2001.
 XX
 XX 23-AUG-2000; 2000WO-US231158.
 XX
 XX 24-AUG-1999; 99US-0150459.
 XX
 PA (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 XX
 XX Cunningham S, Trinidad Arrate Barros M;
 XX WPI: 2001-218425/22.
 DR N-PSDB; AAS00512.
 XX
 PT Novel nucleic acids encoding human junctional adhesion protein useful
 PT for producing antibodies that are suitable for therapeutic purposes -
 XX
 XX Claim 4; Page 46-47; 51pp; English.
 XX
 CC The sequence represents a human junctional adhesion molecule 2 (JAM2).
 CC The polynucleotide encoding the polypeptide is useful for recombinant
 CC production of JAM-2 protein, which in turn is useful for the production
 CC of antibodies. The antibodies may be used for probing cellular
 CC localisation and/or expression of JAM2 in tissues under normal and
 CC disease states, for immunoprecipitating JAM2 protein from cells and/or
 CC stroke tissues to determine whether it is modified by glycosylation and
 CC phosphorylation, and for determining JAM2 function. The antibodies
 CC inhibit interaction of JAM2 with inflammatory cells or influences their
 CC paracellular migration, and is therefore useful for alleviating
 CC inflammatory diseases such as arthritis, asthma, rheumatoid arthritis,
 CC inflammatory bowel disease and Crohn's disease.
 XX
 SQ Sequence 298 AA;
 Query Match 99.8%; Score 1518; DB 22; Length 298;
 Best Local Similarity 99.3%; Pred. No. 1.1e-118;
 Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MARRSRHRLLLRLRYLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTYSR 60
 DB 1 MARRSRHRLLLRLRYLVVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTYSR 60
 QY 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
 DB 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
 QY 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
 DB 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
 QY 181 LGSQSTNSSYTMNTKTGTLQFNVTVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGI 240
 DB 181 LGSQSTNSSYTMNTKTGTLQFNVTVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGI 240
 QY 241 IAAVWVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 DB 241 IAAVWVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
 RESULT 3
 ABP61801
 ID ABP61801 standard; Protein; 298 AA.
 XX
 AC ABP61801;
 XX

PR 06-JUN-1997; 97US-0048970.
PR 05-SEP-1997; 97US-0057765.
XX (HUMA-) HUMAN GENOME SCI INC.
PA Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;
PI Li Y, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;
PI Wei YF, Young PE, Zeng Z;
XX WPI; 1998-520811/44.
DR N-PSDB; AAV34310.
XX
XX Isolated human poly:nucleotide(s) encoding secretory peptide(s) -
PT used to develop products for the diagnosis and treatment of e.g.
PT inflammation, cancers, CNS disorders or immune system disorders
XX
XX Claim 1; Page 168-169; 201pp; English.
XX
XX This sequence represents a secreted human protein encoded by the gene
CC clone detailed in the descriptor line. The gene can be used to generate
CC fusion proteins by linking to the gene to a human immunoglobulin Fc
CC portion (e.g. AAV34277) for increasing the stability of the fused
CC protein as compared to the human protein only.
CC The invention relates to 28 novel genes and their fragments (nucleic
CC acid sequences: AAV34286-V34325; amino acid sequences AAW75196-W75235)
CC which are useful for preventing, treating or ameliorating medical
CC conditions e.g. by protein or gene therapy. Also, pathological
CC conditions can be diagnosed by determining the amount of the new
CC polypeptides in a sample or by determining the presence of mutations in
CC the new polynucleotides. Specific uses are described for each of the 28
CC polynucleotides, based on which tissues they are most highly expressed in
CC (see AAV34286 for described uses).
XX
XX Sequence 298 AA;
SQ
Query Match 99.7%; Score 1517; DB 19; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-1118;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARRSRHLLLLRLVVALGYHKAYGFSAPKQOOVTVVXYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHLLLLRLVVALGYHKAYGFSAPKQOOVTVVXYQEAAILACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Db 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Qy 121 LEEDTVTLVLVAPVPSCEVPSSALSCTVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTVTLVLVAPVPSCEVPSSALSCTVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSOSTNSSYTMNTKTGLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNTSGI 240
Db 181 LGSOSTNSSYTMNTKTGLQFNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNTSGI 240
Qy 241 IAAVVVALVSVGLGVCYVQAKRGYFSKETSFKQSNSSSKATMTSENDFKHTKSFII 298
Db 241 IAAVVVALVSVGLGVCYVQAKRGYFSKETSFKQSNSSSKATMTSENDFKHTKSFII 298
RESULT 5
AAE26983
ID AAE26983 standard; Protein; 298 AA.
XX
AC AAE26983;
XX
XX 13-DEC-2002 (first entry)
DT
DE Human gene 25 encoded secreted protein HTEBB42, SEQ ID NO:76.
XX
XX Human; immunodeficiency; X-linked agammaglobulinemia; septic shock;
KW autoimmune disorder; rheumatoid arthritis; multiple sclerosis; cancer;
KW Grave's disease; diabetes mellitus; haematopoietic disorder; stroke;
KW

KW respiratory disorder; asthma; allergy; gastrointestinal disorder;
KW inflammatory bowel disease; neurodegenerative disorder; hepatitis;
KW Parkinson's disease; Alzheimer's disease; cardiovascular disorder;
KW atherosclerosis; myocarditis; renal disorder; fungicide; virucide;
KW hyperproliferative disorder; acute glomerulonephritis; tonsillitis;
KW respiratory disorder; rhinitis; sinusitis; neurologic disease;
KW endocrine disorder; Addison's disease; reproductive system disorder;
KW endometriosis; vasotropic; vulnery; cytostatic; nootropic; cardiant;
KW anti-HIV; tranquilliser; gout; antiparasitic.
XX
OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH Peptide 1..22
FT /label= Signal_peptide
FT Protein 23..298
FT /note= "Human mature secreted protein"
FT Misc-difference 42
FT /label= Unknown
FT /note= "Encoded by GWG"
FT Misc-difference 58
FT /label= Unknown
FT /note= "Encoded by TSC"
XX
XX US2002077287-A1.
XX
XX 20-JUN-2002.
XX
XX 11-MAY-2001; 2001US-0852659.
XX
XX 11-SEP-1998; 98US-0152060.
XX
XX (RUBE/) RUBEN S M.
PA (ROSE/) ROSEN C A.
PA (LIYY/) LI Y.
PA (ZENG/) ZENG Z.
PA (KYAW/) KYAW H.
PA (FISC/) FISCHER C L.
PA (LIHH/) LI H.
PA (SOPP/) SOPPET D R.
PA (GENT/) GENTZ R L.
PA (WEIY/) WEI Y.
XX
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX
XX WPI; 2002-598780/64.
DR
DR N-PSDB; AAD44660.
XX
XX Novel human secreted polypeptides and polynucleotides for diagnosing,
PT preventing, treating immune, hyperproliferative, cardiovascular,
PT neurological, reproductive disorders and identifying modulators of
PT therapeutic use -
XX
XX Claim 11; Page 186; 209pp; English.
XX
XX AAD44636-AAD44676 represent cDNAs corresponding to 28 human secreted
CC protein genes, and AAE26959-AAE26999 represent the proteins they encode.
CC AAE27000-AAE27025 represent human secreted protein fragments or their
CC variants. The secreted proteins and genes are useful for preventing,
CC treating or ameliorating medical conditions, e.g., by protein or gene
CC therapy. Specific uses are described for each of the 28 genes, based
CC on the tissues in which they are most highly expressed and include
CC developing products for the diagnosis or treatment of immunodeficiencies,
CC e.g., X-linked agammaglobulinaemia, B cell immunodeficiencies, severe
CC combined immunodeficiencies, autoimmune disorders e.g., systemic lupus
CC erythematosus, rheumatoid arthritis, multiple sclerosis, autoimmune
CC thyroiditis, autoimmune haemolytic anaemia, Goodpasture's syndrome,
CC Grave's disease, diabetes mellitus, dermatitis, inflammatory conditions
CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
CC disease, Crohn's disease, haematopoietic disorders, respiratory
CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,

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CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
CC ischaemic brain injury and/or stroke, neurodegenerative disorders e.g.,
CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
CC prion disease, cardiovascular disorders e.g., myocarditis, arrhythmias,
CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
CC related disorder (thrombosis, arterial thrombosis, atherosclerosis),
CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
CC renal disorders. e.g. acute glomerulonephritis, neurological diseases,
CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
CC disease, hyperpituitarism, infectious diseases and reproductive system
CC disorders e.g. endometriosis. The present sequence represents a human
CC secreted protein of the invention.
XX
SQ Sequence 298 AA;

Query Match 99.7%; Score 1517; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-118;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLLLLRYLVVALGYHKA YGFSAPKDDQVVTAVYQEA ILLACKTPKKT VXR 60
DB 1 MARRSRHRLLLLLLRYLVVALGYHKA YGFSAPKDDQVVTAVYQEA ILLACKTPKKT VXR 60
QY 61 LEWKKLGRSVSFVYYQOTLQGD FKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSQGN 120
DB 61 LEWKKLGRSVSFVYYQOTLQGD FKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSQGN 120
QY 121 LLEDTVTLEVLNAPAVPSCEVPSSALSGTVLRCQDKEGNPAPEYTFWKDGIRLLENPR 180
DB 121 LLEDTVTLEVLNAPAVPSCEVPSSALSGTVLRCQDKEGNPAPEYTFWKDGIRLLENPR 180
QY 181 LGSQSTNSSTYTWNTKTGTLQFNTVSKLDTGEYSCEARNSVGVRRCQKRMQVDDLNI 240
DB 181 LGSQSTNSSTYTWNTKTGTLQFNTVSKLDTGEYSCEARNSVGVRRCQKRMQVDDLNI 240
QY 241 IAAVVVALVISVCGLGVCYAKRGKGYFSKETSFOKSNSSSKATMTSENDFKHTKSFII 298
DB 241 IAAVVVALVISVCGLGVCYAKRGKGYFSKETSFOKSNSSSKATMTSENDFKHTKSFII 298

RESULT 6
AAE27121
ID AAE27121 standard; Protein; 298 AA.
AC AAE27121;
XX
XX 13-DEC-2002 (first entry)
DE Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
XX
KW Human; secreted protein; autoimmune disease; hyperproliferative disorder;
KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
KW cerebral ischaemia; cardiovascular disorder; nervous system disorder;
KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
KW infection; corneal infection; skin aging; food additive; preservative;
KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
KW cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective;
KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
KW vu.nerary.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..22 /label= Signal_peptide
FT Protein 23..298 /label= Mature human secreted protein"
FT Misc-difference 42 /note= "Encoded by GWG"

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FT Misc-difference 58 /label= Unknown
FT /note= "Encoded by TSC"
XX
PN US2002076756-A1.
XX 20-JUN-2002.
XX
PF 11-MAY-2001; 2001US-0853161.
XX 02-FEB-2001; 2001US-365583P.
XX (RUBE/) RUBEN S M.
PA (ROSE/) ROSEN C A.
PA (LIYY/) LI Y.
PA (ZENG/) ZENG Z.
PA (KYAW/) KYAW H.
PA (FISC/) FISCHER C L.
PA (LIHH/) LI H.
PA (SOPP/) SOPPET D R.
PA (GENT/) GENTZ R L.
PA (WEIY/) WEI Y.
PA (MOOR/) MOORE P A.
PA (YOUN/) YOUNG P E.
PA (GREE/) GREENE J M.
PA (FERR/) FERRIE A M.
XX
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX
XX WPI: 2002-574454/61.
XX N-PSDB; AAD44878.
XX
XX New nucleic acid molecules encoding 28 human secreted proteins, useful
XX for diagnosing, preventing, treating or ameliorating medical conditions
XX and as food additives or preservatives -
XX
XX Claim 11; Page 186-187; 209pp; English.
XX
XX AAD44854-AAD44984 represent cDNAs corresponding to 28 human secreted
XX protein genes, and AAE27097-AAE27137 represent the proteins they encode.
XX AAE27138-AAE27164 represent human secreted protein fragments. The genes
XX and their corresponding secreted proteins are useful for preventing,
XX treating or ameliorating medical conditions, e.g., by protein or gene
XX therapy. Secreted protein sequences of the invention are useful for the
XX diagnosis or treatment of disorders such as autoimmune diseases (e.g.
XX rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
XX the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
XX angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
XX system disorders (e.g. Alzheimer's disease), infections caused by fungi,
XX bacteria and viruses and ocular disorders (e.g. corneal infection). The
XX polypeptides can also be used to aid wound healing and epithelial cell
XX proliferation, to prevent skin aging due to sunburn, to maintain organs
XX before transplantation, for supporting cell culture of primary tissues,
XX to regenerate tissues and in chemotaxis. They can also be used as food
XX additives or preservative to increase or decrease storage capabilities,
XX fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
XX and other nutritional components. The present sequence represents a human
XX secreted protein of the invention.
XX
XX Sequence 298 AA;

Query Match 99.7%; Score 1517; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-118;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLLLLRYLVVALGYHKA YGFSAPKDDQVVTAVYQEA ILLACKTPKKT VXR 60
DB 1 MARRSRHRLLLLLLRYLVVALGYHKA YGFSAPKDDQVVTAVYQEA ILLACKTPKKT VXR 60
QY 61 LEWKKLGRSVSFVYYQOTLQGD FKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSQGN 120

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Db 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Qy 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFGDGIIRLLENPR 180
Db 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFGDGIIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCQKRMQVDDLNIISI 240
Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCQKRMQVDDLNIISI 240
Qy 241 IAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSKATMTSENDFKHTKSFII 298
Db 241 IAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSKATMTSENDFKHTKSFII 298

RESULT 7
ABR47926
ID ABR47926 standard; Protein; 298 AA.
XX
AC ABR47926;
DT 12-JUN-2003 (first entry)
XX
DE Human secreted protein, SEQ ID 817.
XX
KW Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
KW vulnery; antiinflammatory; nootropic; neuroprotective;
KW antiparkinsonian; gene therapy; human; cardiovascular disorder.
XX
OS Homo sapiens.
XX
PN WO200295010-A2.
XX
PD 28-NOV-2002.
XX
PF 19-MAR-2002; 2002WO-US09785.
XX
PR 21-MAR-2001; 2001US-277340P.
PR 19-JUL-2001; 2001US-306171P.
PR 13-NOV-2001; 2001US-331287P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
XX WPI; 2003-129429/12.
XX
PT Novel human secreted proteins, useful for detecting, preventing,
PT diagnosing, prognosticating, treating and/or ameliorating
PT cardiovascular disorders such as arrhythmia -
XX
PS Claim 13; SEQ ID 817; 1881pp; English.

CC The present invention relates to novel human secreted proteins
CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
CC proteins and their coding sequences are useful for the preparation of a
CC diagnostic or pharmaceutical composition for diagnosing or treating a
CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
CC coronary arteriosclerosis and myocardial ischaemia), neural disorders,
CC immune system disorders, muscular disorders, reproductive disorders,
CC gastrointestinal disorders, pulmonary disorders, renal disorders,
CC proliferative disorders and/or cancerous diseases and conditions, for
CC wound healing and epithelial cell proliferation, to treat inflammation or
CC infection, for treating thrombosis and arteriosclerosis, for treating or
CC preventing neural damage which occurs in neuronal disorders or
CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
CC disease, to enhance bone and periodontal regeneration and aid in tissue
CC transplants or bone grafts, to prevent skin aging or hair loss, to
CC stimulate growth and differentiation of haematopoietic cells and bone
CC marrow cells when used in combination with other cytokines, to maintain
CC organs before transplantation or for supporting cell culture of primary
CC tissues, to increase or decrease differentiation or proliferation of
CC embryonic stem cells, or to modulate mammalian characteristics or

CC metabolism.
CC Note: The sequence data for this patent was published in electronic
CC format and is available from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 298 AA;
Query Match 99.7%; Score 1517; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-118; Indels 0; Gaps 0;
Matches 298; Conservative 0; Mismatches 0;
Qy 1 MARRSRHRLLLRLVWALGYHKAQYGFSAKPDQQVVTAVYQEAIALACKTPKKTYSR 60
Db 1 MARRSRHRLLLRLVWALGYHKAQYGFSAKPDQQVVTAVYQEAIALACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Db 61 LEWKLGSRVSFVYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
Qy 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFGDGIIRLLENPR 180
Db 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFGDGIIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCQKRMQVDDLNIISI 240
Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCQKRMQVDDLNIISI 240
Qy 241 IAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSKATMTSENDFKHTKSFII 298
Db 241 IAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSKATMTSENDFKHTKSFII 298

RESULT 8
ABU64994
ID ABU64994 standard; Protein; 298 AA.
XX
AC ABU64994;
DT 15-MAY-2003 (first entry)
XX
DE Human secreted protein gene 25, protein.
XX
KW Secreted protein; immunodeficiency; multiple sclerosis;
KW severe combined immunodeficiency; autoimmune disorder; cancer;
KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;
KW inflammatory condition; septic shock; inflammatory bowel disease;
KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;
KW gastrointestinal disorder; central nervous system disorder;
KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;
KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;
KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;
KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;
KW endocrine disorder; liver disease; reproductive system disorder;
KW endometriosis; infectious disease; pancreatic disorder; vaccine;
KW wound repair; angiogenesis; lymphatic disorder; hair loss; body weight;
XX body height; hair colour; human.
OS Homo sapiens.
XX
XX US2002172994-A1.
XX
XX 21-NOV-2002.
XX
XX 11-MAY-2001; 2001US-0852797.
XX
XX 14-MAR-1997; 97US-040710P.
XX 14-MAR-1997; 97US-040762P.
XX 30-MAY-1997; 97US-048100P.
XX 30-MAY-1997; 97US-048189P.
XX 30-MAY-1997; 97US-048357P.
XX 30-MAY-1997; 97US-050334P.
XX 06-JUN-1997; 97US-048970P.
XX 05-SEP-1997; 97US-057765P.

19-DEC-1997; 97US-068368P.
02-FEB-2001; 2001US-265583P.
12-MAR-1998; 98MO-US04858.
11-SEP-1998; 98US-0152060.

(RUBE/) RUBEN S M.
(ROSE/) ROSEN C A.
(LIYV/) LI Y.
(ZENG/) ZENG Z.
(KYAW/) KYAW H.
(FISC/) FISCHER C L.
(LIHH/) LI H.
(SOPP/) SOPPET D R.
(GENT/) GENTZ R L.
(WEIY/) WEI Y.
(MOOR/) MOORE P A.
(YOUN/) YOUNG P E.
(GREEN/) GREENE J M.
(FERR/) FERRIE A M.

Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
Ferrie AM;

WPI; 2003-310989/30.
N-PSDB; ABX96990.

New human secreted polypeptides and polynucleotides for diagnosing,
prognosing, preventing and treating immune, hyperproliferative, liver,
kidney, reproductive disorders and for identifying modulators of
therapeutic use -

Claim 11; Page 186; 209pp; English.

The invention relates to an isolated polypeptide comprising an amino acid
sequence at least 95% identical to sequence of 28 human secreted
proteins, their fragment, polypeptide domain, epitope, secreted form,
variant, allelic variant, or species homologue, or the encoded sequence
included in ATCC 97921 and 97922. Also included are the encoding
nucleic acids, recombinant vectors, host cells, antibodies, and genes.
The proteins and nucleic acids are useful for diagnosing, preventing,
treating, prognosing or ameliorating a medical condition e.g.
immunodeficiencies (e.g. X-linked agammaglobulinemia, B cell
immunodeficiencies, severe combined immunodeficiencies), autoimmune
disorders (e.g. systemic erythematosus, rheumatoid arthritis, multiple
sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
haematopoietic disorders, inflammatory conditions (e.g. septic shock,
sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
respiratory disorders (e.g. asthma and allergy), gastrointestinal
disorders, cancers (e.g. gastric, ovarian, lung, bladder, liver and
breast), central nervous system (CNS) disorders (e.g. ischaemic brain
injury and/or stroke, traumatic brain injury), neurodegenerative
disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
dementia, and prion disease), cardiovascular disorders (e.g.
atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
bypass complications), inflammation (e.g. hepatitis, gout, trauma,
pancreatitis, sarcoidosis, dermatitis, allogenic transplant rejection),
blood-related disorders (thrombosis, arterial thrombosis),
hyperproliferative disorders, renal disorders (e.g. acute
glomerulonephritis), endocrine disorders (e.g. Addison's disease,
hyperthyroidism, hypoparathyroidism), liver diseases and disorders,
reproductive system disorders (e.g. endometriosis), infectious diseases,
and pancreatic disorders. Many other diseases and disorders are listed in
the specification. They also useful as a vaccine adjuvant. Further they
are useful to enhance or inhibit complement mediated cell lysis, for
stimulating wound and tissue repair, angiogenesis, and the repair of
vascular or lymphatic diseases or disorders. They are also useful
to prevent hair loss, to modulate mammalian characteristics such as body
height, weight, hair colour, and to increase or decrease storage
capabilities, fat content, lipid, protein, carbohydrate, vitamins,
minerals, cofactors or other nutritional components. The proteins are
also useful for identifying binding partners. The present sequence

CC represents a secreted protein of the invention.

SQ Sequence 298 AA;

Query Match 99.7%; Score 1517; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-118;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRRLLLLLLLRYLVVALGYHKAQSPKDDQVVTAVYQEAAILACKTKPKTVXSR 60
DB 1 MARRSRRLLLLLLLRYLVVALGYHKAQSPKDDQVVTAVYQEAAILACKTKPKTVXSR 60
QY 61 LEWKKLGRSVSVFYVYQOOLQGFQKRAEMIDENIRIKNVTSDAGKYRCEVSAPSQGN 120
DB 61 LEWKKLGRSVSVFYVYQOOLQGFQKRAEMIDENIRIKNVTSDAGKYRCEVSAPSQGN 120
QY 121 LEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQDEKGNPAPEYTWFKDGIIRLENPR 180
DB 121 LEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQDEKGNPAPEYTWFKDGIIRLENPR 180
QY 181 LGSQSTNSSTYTNWTKTGLQFNVTGKLDGTGEYSCEARNVGVYRRCQKRMQVDDLNISGI 240
DB 181 LGSQSTNSSTYTNWTKTGLQFNVTGKLDGTGEYSCEARNVGVYRRCQKRMQVDDLNISGI 240
QY 241 IAAVVVALVISVCGLVGYCYAQRKGYSKETSFOKSNSSSKATTMSKTSFI 298
DB 241 IAAVVVALVISVCGLVGYCYAQRKGYSKETSFOKSNSSSKATTMSKTSFI 298

RESULT 9

ABR00172
ID ABR00172 standard; Protein; 298 AA.

AC ABR00172;

DT 03-APR-2003 (first entry)

XX Human gene 162 encoded secreted protein HTEB42, SEQ ID NO:461.

XX Human; secreted protein; digestive disorder; gastrointestinal disorder;
mouth; oesophagus; stomach; small intestine; large intestine; liver;
biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
immune disorder; inflammation; infection; wound healing; drug screening;
chromosome identification; chromosome mapping; cytostatic; gene therapy;
antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.

OS Homo sapiens.

XX WO200276488-A1.

XX 03-OCT-2002.

PF 19-MAR-2002; 2002WO-US08276.

XX 21-MAR-2001; 2001US-277340P.

PR 19-JUL-2001; 2001US-306171P.

PR 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Ruben SM;

XX WPI; 2003-029900/02.

XX N-PSDB; ABZ71351.

XX New human secreted proteins and nucleic acids, useful for detecting,
preventing, diagnosing, prognosticating, treating and/or ameliorating
e.g. gastrointestinal diseases and disorders, or cancers -

PS Claim 13; Page 1046-1047; 1216pp; English.

XX ABZ71190-ABZ71478 represent cDNAs corresponding to 178 human secreted
protein genes, and ABP00011-ABP00299 represent the proteins they encode.

CC AB271479-AB271540 represent human secreted protein genomic fragments. The
CC invention also encompasses antibodies specific for the secreted proteins, the
CC use of the secreted proteins in drug screening, and recombinant
CC vectors and host cells comprising a nucleic acid of the invention. The
CC secreted proteins, nucleic acids encoding them, antibodies or antibody
CC fragments specific for the secreted proteins, and modulators of protein
CC activity are useful for diagnosing, treating, ameliorating or preventing
CC digestive disorders. Such conditions include disorders of the mouth,
CC oesophagus, stomach, small intestine, large intestine, liver, biliary
CC tract and pancreas, and include cancers of these organs and tissues. The
CC secreted proteins and their nucleic acids may also be used in the
CC treatment of immune disorders, inflammation, infection,
CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
CC of the invention may be used for chromosome identification, chromosome
CC mapping, in gene therapy, for identifying individuals from minute
CC biological samples, as hybridisation probes, and as molecular weight
CC markers. The present sequence represents a human secreted protein of the
CC invention.

XX SQ Sequence 298 AA;

Query Match 99.7%; Score 1517; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-118;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQVVTAVYQEAAILACKTPKTVXSR 60
DB 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQVVTAVYQEAAILACKTPKTVXSR 60
QY 61 LEWKLGSRVSFVYQOQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
DB 61 LEWKLGSRVSFVYQOQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
QY 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTFWFKDGIRLLENPR 180
DB 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTFWFKDGIRLLENPR 180
QY 181 LGSQSTNSSYTMTKTGTLQFNTVSKLDTGEYSCARNVGVYRRCGKRMQVDDLNISGI 240
DB 181 LGSQSTNSSYTMTKTGTLQFNTVSKLDTGEYSCARNVGVYRRCGKRMQVDDLNISGI 240
QY 241 IAAVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTWSEDFKHTKSFII 298
DB 241 IAAVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTWSEDFKHTKSFII 298

RESULT 10
AAO16452
ID AAO16452 standard; protein; 298 AA.
XX AAO16452;
AC AAO16452;
DT 17-APR-2003 (first entry)
DE Human junctional adhesion molecule 2 (huJAM2).

XX Human; gene therapy; extracellular region; junctional adhesion molecules;
KW huJAM; immune system disorder; immune deficiency; autoimmune disorder;
KW inflammatory disorder; cancer; wound healing; cardiovascular disease;
KW full-length membrane-bound huJAM protein.

XX Homo sapiens.

XX Key Location/Qualifiers
FH Peptide 1..28
FT /label= Signal_peptide
FT Domain 29..236
FT /note= "Extracellular domain; Specifically claimed
FT region"
FT 29..298
FT /note= "Mature huJAM2"
XX XX
PN WO2003008541-A2.

XX 30-JAN-2003.
PD
XX
XX
XX 05-JUL-2002; 2002WO-US19800.
XX
XX 16-JUL-2001; 2001US-305752P.
PR 05-FEB-2002; 2002US-354345P.
XX
XX (ELIL) LILLY & CO ELJ.
XX
XX Heuer JG, Smith RC, Su EW;
PI WPI; 2003-221848/21.
DR N-PSDB; AAL51599.
XX
XX New extracellular human junctional adhesion molecule (huJAM)
PT polypeptide, useful for treating an immune system disorder such as an
PT immune deficiency or an inflammatory disorder, cancer, wound healing,
PT or a cardiovascular disease -
XX
XX Disclosure; Fig 1; 131pp; English.
XX
XX The invention comprises the DNA and protein sequences of the
CC extracellular region of human junctional adhesion molecules (huJAM). The
CC extracellular huJAM DNA and protein sequences are useful in the treatment
CC of: immune system disorders (e.g. immune deficiency); autoimmune
CC disorders; inflammatory disorders; cancer; wound healing; or a
CC cardiovascular disease. The present amino acid sequence represents the
CC full-length membrane-bound huJAM2 protein.

XX SQ Sequence 298 AA;

Query Match 99.5%; Score 1514; DB 24; Length 298;
Best Local Similarity 99.0%; Pred. No. 2.4e-118;
Matches 295; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQVVTAVYQEAAILACKTPKTVXSR 60
DB 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQVVTAVYQEAAILACKTPKTVXSR 60
QY 61 LEWKLGSRVSFVYQOQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
DB 61 LEWKLGSRVSFVYQOQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
QY 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTFWFKDGIRLLENPR 180
DB 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTFWFKDGIRLLENPR 180
QY 181 LGSQSTNSSYTMTKTGTLQFNTVSKLDTGEYSCARNVGVYRRCGKRMQVDDLNISGI 240
DB 181 LGSQSTNSSYTMTKTGTLQFNTVSKLDTGEYSCARNVGVYRRCGKRMQVDDLNISGI 240
QY 241 IAAVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTWSEDFKHTKSFII 298
DB 241 IAAVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTWSEDFKHTKSFII 298

RESULT 11
AAW23693
ID AAW23693 standard; Protein; 303 AA.
XX AAW23693;
AC AAW23693;
XX
XX 12-OCT-2001 (first entry)
DT
XX Human EST encoded protein SEQ ID NO: 1218.
DE Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; horse;
KW tomato; monkey; dog; sea urchin; expressed sequence tag; EST;
KW diagnostics; forensic test; gene mapping; genetic disorder;
KW biodiversity; gene therapy; nutrition.
XX
XX Homo sapiens.
OS

PN WO200154477-A2.
 XX
 XX
 PD 02-AUG-2001.
 XX
 XX 25-JAN-2001; 2001WO-US02687.
 XX
 XX 25-JAN-2000; 2000US-0491404.
 PR 17-JUL-2000; 2000US-0617746.
 PR 03-AUG-2000; 2000US-0631451.
 PR 15-SEP-2000; 2000US-0663870.
 XX
 PA (HYSE-) HYSEQ INC.
 XX
 XX Tang YT, Liu C, Zhou P, Qian XB, Wang Z, Chen R, Asundi V;
 PI Cao Y, Drmanac RA, Zhang J, Werhman T;
 XX
 DR WPI; 2001-476164/51.
 DR N-PSDB; AAH98352.
 XX
 XX Isolated polypeptide for treatment of diseases, diagnostics, raising
 PT antibodies and research use -
 PT
 XX Claim 20; Page 878-879; 1275pp; English.
 XX
 CC The present invention provides the protein and coding sequences of novel
 CC proteins from a variety of organisms, including human, dog, cat, horse,
 CC cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea
 CC urchin and tomato. These were derived from expressed sequence tags (ESTs)
 CC from the organism of interest. They can be used in diagnostics,
 CC forensics, gene mapping, identification of mutations, to assess
 CC biodiversity and for nutritional purposes. The present sequence is a
 CC protein of the invention.
 XX
 XX Sequence 303 AA;
 SQ
 Query Match 98.8%; Score 1502.5; DB 22; Length 303;
 Best Local Similarity 97.4%; Pred. No. 2.3e-117;
 Matches 295; Conservative 1; Mismatches 2; Indels 5; Gaps 1;
 QY 1 MARRSRRLRLRLRLRLVVALGVHKKAYGFSAPKQDQVTVAVYQEAIALACKTPKKTVXSR 60
 DB 1 MARRSRRLRLRLRLRLVVALGVHKKAYGFSAPKQDQVTVAVYQEAIALACKTPKKTVSR 60
 QY 61 LEWKKLGRSVFVYQOTLQGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEOGQN 120
 DB 61 LEWKKLGRSVFVYQOTLQGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEOGQN 120
 QY 121 LEEDTVTLVL-----VAPAVPSCEVPSSALSGTVVVELRCQDKGNPAPEYTMFKDGIRL 175
 DB 121 LEEDTVTLVLGDVHVLAPAVPSCEVPSSALSGTVVVELRCQDKGNPAPEYTMFKDGIRL 180
 QY 176 LENPRLGSOSTSSYTMNTKTGTLQNTVSKLDTGEYSCEARNSVYRCPGKRMQVDDL 235
 DB 181 LENPRLGSOSTSSYTMNTKTGTLQNTVSKLDTGEYSCEARNSVYRCPGKRMQVDDL 240
 QY 236 NISGIIAAVVVALVSVGLGVYCAQRKGYSFKETSFOKSNSSSKATMTSENDFKHTKS 295
 DB 241 NISGIIAAVVVALVSVGLGVYCAQRKGYSFKETSFOKSNSSSKATMTSENDFKHTKS 300
 QY 296 FII 298
 DB 301 FII 303
 RESULT 12
 AAY08060
 ID AAY08060 standard; Protein; 312 AA.
 XX
 AC AAY08060;
 XX
 XX 11-SEP-2000 (first entry)
 DT
 XX

DE XX Human PRO245 protein.
 KW Inflammatory cell infiltration; immune response; T cell proliferation;
 KW anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthropathy;
 KW T cell-mediated disease; spondyloarthropathy; sclerosis; renal disease;
 KW inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 KW diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 KW multiple sclerosis; polyneuropathy; hepatitis; cirrhosis; enteropathy;
 KW sclerosing cholangitis; inflammatory bowel disease; Whipple's disease;
 KW skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 KW food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 KW idiopathic pulmonary fibrosis; graft rejection; PRO245; human.
 XX
 OS Homo sapiens.
 XX
 PN WO9914241-A2.
 XX
 PD 25-MAR-1999.
 XX
 XX 17-SEP-1998; 98WO-US19437.
 PF
 XX 17-SEP-1997; 97US-0059119.
 PR 18-SEP-1997; 97US-0059263.
 PR 28-OCT-1997; 97US-0063550.
 PR 12-NOV-1997; 97US-0065186.
 PR 21-NOV-1997; 97US-0066364.
 PR 24-NOV-1997; 97US-0066770.
 PR 04-JUN-1998; 98US-0088026.
 XX
 PA (GETH) GENENTECH INC.
 XX
 XX Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;
 PI
 XX WPI; 1999-229499/19.
 DR N-PSDB; AAX37664.
 XX
 XX Composition containing novel polypeptide PRO245, its agonist or
 PT antagonist -
 PT
 XX Example 1; Fig 2; 177pp; English.
 PS
 XX This invention describes a novel composition containing (apart from a
 CC carrier or excipient), a novel PRO245 polypeptide (I), its agonist or
 CC antagonist, or their fragments, for modulating: (i) infiltration of
 CC inflammatory cells into tissue; (ii) an immune response; or (iii) T cell
 CC proliferation. The products of the invention have anti-inflammatory,
 CC anti-autoimmune and anti-diabetic activity. (I), and its (ant)agonists
 CC and their fragments, are used to treat immune-related diseases,
 CC particularly T cell-mediated diseases. The diseases treated include
 CC systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 CC arthritis, spondyloarthropathies, systemic sclerosis (scleroderma),
 CC idiopathic inflammatory myopathies (dermatomyositis, polymyositis),
 CC Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune
 CC hemolytic anemia (immune pancytopenia, paroxysmal nocturnal
 CC hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenic
 CC purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease,
 CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 CC thyroiditis), diabetes mellitus, immune-mediated renal disease
 CC (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis,
 CC idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic
 CC inflammatory demyelinating polyneuropathy, infectious hepatitis, chronic
 CC (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune
 CC chronic active hepatitis, primary biliary cirrhosis, granulomatous
 CC hepatitis, and sclerosing cholangitis, inflammatory bowel disease
 CC (ulcerative colitis: Crohn's disease), gluten-sensitive enteropathy, and
 CC Whipple's disease. Autoimmune or immune-mediated skin diseases including
 CC bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis,
 CC asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity,
 CC urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis,
 CC hypersensitivity pneumonitis, and transplantation associated diseases
 CC (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists
 CC or fragment can also be used as an adjuvant in treatment of tumors.

CC Antibodies against (I) can also be used for diagnosing such diseases.
CC This sequence represents the human PRO245 protein described in the
CC invention.
XX
SQ Sequence 312 AA;

Query Match 96.3%; Score 1465; DB 20; Length 312;
Best Local Similarity 99.3%; Pred. No. 3.2e-114;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MARRSRRLRLRLRLRLVVALGVHKGAFSAPKQDVVTAAXYOEAILACKTPKKTYSR 60
DB 1 MARRSRRLRLRLRLRLVVALGVHKGAFSAPKQDVVTAAXYOEAILACKTPKKTYSR 60

QY 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSEOCQN 120
DB 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSEOCQN 120

QY 121 LEEDTTLVLELVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
DB 121 LEEDTTLVLELVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSVTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNISGI 240
DB 181 LGSQSTNSSVTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNISGI 240

QY 241 IAAVWVVALVISVGLGVCAQRKGYSKETSFKQSNSSSKATTMSN 288
DB 241 IAAVWVVALVISVGLGVCAQRKGYSKETSFKQSNSSSKATTMSN 288

RESULT 14
AAV23324
ID AAY23324 standard; Protein; 312 AA.
XX
AC AAY23324;
XX
DT 02-SEP-1999 (first entry)
XX
DE Amino acid sequence of protein PRO245.
XX
KW Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophica areata;
KW anti-thrombotic; wound healing; tissue repair.
XX
OS Homo sapiens.
XX
PN WO9914328-A2.
XX
PD 25-MAR-1999.
XX
PP 16-SEP-1998; 98WO-US19330.
XX

CC arthritis, spondyloarthropathies, systemic sclerosis, scleroderma,
CC idiopathic inflammatory myopathies, dermatomyositis, polymyositis,
CC Sjogren's syndrome, systemic vaculitis, sarcoidosis, autoimmune hemolytic
CC anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,
CC autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura,
CC immune-mediated thrombocytopenia, juvenile lymphocytic thyroiditis, atrophic
CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
CC thyroiditis, diabetes mellitus, immune-mediated renal disease,
CC glomerulonephritis, tubulointerstitial nephritis, demyelinating diseases
CC of the central and peripheral nervous systems such as multiple sclerosis,
CC idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis
CC A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active
CC hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing
CC cholangitis, inflammatory and fibrotic lung diseases, gluten-sensitive
CC enteropathy, Whipple's disease, autoimmune or immune-mediated skin
CC diseases allergic diseases of the lung such as eosinophilic pneumonias,
CC idiopathic pulmonary fibrosis and hypersensitivity pneumonitis
CC transplantation associated diseases disease. The present sequence
CC represents PRO245.
XX
SQ Sequence 312 AA;

Query Match 96.3%; Score 1465; DB 20; Length 312;
Best Local Similarity 99.3%; Pred. No. 3.2e-114;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MARRSRRLRLRLRLVVALGVHKGAFSAPKQDVVTAAXYOEAILACKTPKKTYSR 60
DB 1 MARRSRRLRLRLRLVVALGVHKGAFSAPKQDVVTAAXYOEAILACKTPKKTYSR 60

QY 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSEOCQN 120
DB 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSEOCQN 120

QY 121 LEEDTTLVLELVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
DB 121 LEEDTTLVLELVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSVTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNISGI 240
DB 181 LGSQSTNSSVTMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGRMQVDDLNISGI 240

QY 241 IAAVWVVALVISVGLGVCAQRKGYSKETSFKQSNSSSKATTMSN 288
DB 241 IAAVWVVALVISVGLGVCAQRKGYSKETSFKQSNSSSKATTMSN 288

RESULT 14
AAV13354
ID AAY13354 standard; Protein; 312 AA.
XX
AC AAY13354;
XX
DT 25-JUN-1999 (first entry)
XX
DE Amino acid sequence of protein PRO245.
XX
KW Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophica areata;
KW anti-thrombotic; wound healing; tissue repair.
XX
OS Homo sapiens.
XX
PN WO9914328-A2.
XX
PD 25-MAR-1999.
XX
PP 16-SEP-1998; 98WO-US19330.
XX

PR	25-NOV-1997;	97US-0066840.
PR	17-SEP-1997;	97US-0059113.
PR	17-SEP-1997;	97US-0059115.
PR	17-SEP-1997;	97US-0059117.
PR	17-SEP-1997;	97US-0059119.
PR	17-SEP-1997;	97US-0059121.
PR	17-SEP-1997;	97US-0059122.
PR	17-SEP-1997;	97US-0059184.
PR	18-SEP-1997;	97US-0059263.
PR	15-OCT-1997;	97US-0062125.
PR	17-OCT-1997;	97US-0062285.
PR	17-OCT-1997;	97US-0062287.
PR	21-OCT-1997;	97US-0063486.
PR	24-OCT-1997;	97US-0062814.
PR	24-OCT-1997;	97US-0062816.
PR	24-OCT-1997;	97US-0063045.
PR	24-OCT-1997;	97US-0063120.
PR	24-OCT-1997;	97US-0063121.
PR	24-OCT-1997;	97US-0063127.
PR	24-OCT-1997;	97US-0063128.
PR	27-OCT-1997;	97US-0063329.
PR	27-OCT-1997;	97US-0063327.
PR	28-OCT-1997;	97US-0063541.
PR	28-OCT-1997;	97US-0063542.
PR	28-OCT-1997;	97US-0063544.
PR	28-OCT-1997;	97US-0063549.
PR	28-OCT-1997;	97US-0063550.
PR	28-OCT-1997;	97US-0063564.
PR	29-OCT-1997;	97US-0063435.
PR	29-OCT-1997;	97US-0063704.
PR	29-OCT-1997;	97US-0063732.
PR	29-OCT-1997;	97US-0063738.
PR	29-OCT-1997;	97US-0063734.
PR	29-OCT-1997;	97US-0064215.
PR	29-OCT-1997;	97US-0063735.
PR	31-OCT-1997;	97US-0063870.
PR	31-OCT-1997;	97US-0064103.
PR	03-NOV-1997;	97US-0064248.
PR	07-NOV-1997;	97US-0064809.
PR	12-NOV-1997;	97US-0065186.
PR	17-NOV-1997;	97US-0065846.
PR	18-NOV-1997;	97US-0065693.
PR	21-NOV-1997;	97US-0066120.
PR	21-NOV-1997;	97US-0066364.
PR	24-NOV-1997;	97US-0066772.
PR	24-NOV-1997;	97US-0066466.
PR	24-NOV-1997;	97US-0066770.
PR	24-NOV-1997;	97US-0066511.
PR	24-NOV-1997;	97US-0066453.
XX		
PA	(GETH) GENENTECH INC.	
XX		
PI	Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;	
XX		
DR	WPI; 1999-229533/19.	
DR	N-PSDB; AAX52225.	
XX		
PT	New isolated human genes and polypeptides used in, e.g. treatment of	
XX	gastrointestinal ulceration	
PS	Claim 12; Fig 24; 320pp; English.	
XX		
CC	AAV13344-403 represent secreted and transmembrane human proteins.	
CC	The cDNA sequences are obtained from cDNA libraries, prepared from	
CC	fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.	
CC	The encoded polypeptides have specific uses based on their homology to	
CC	known polypeptides, e.g. PRO211 and PRO217 can be used for disorders	
CC	associated with the preservation and maintenance of gastrointestinal	
CC	mucosa and the repair of acute and chronic mucosal lesions	
CC	(e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal	
CC	ulceration and congenital microvillus atrophy), skin diseases associated	
CC	with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial	

CC	cancers such as lung squamous cell carcinoma of the vulva and gliomas),
CC	potent effects on cell growth and development, diseases related to
CC	growth or survival of nerve cells including Parkinson's disease,
CC	Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as
CC	for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used
CC	as a target for anti-tumor drugs. PRO533 may be used in the treatment
CC	of Usher Syndrome or Atrophia areaea; PRO269 can be used as an
CC	anti-thrombotic agent; PRO287 polypeptides and portions may have
CC	therapeutic applications in wound healing and tissue repair; PRO317 can
CC	be used for treating problems of the kidney, uterus, endometrium, blood
CC	vessels, or related tissue, e.g. in the heart of genital tract.
XX	
QQ	Sequence 312 AA;
Query Match	96.3%; Score 1465; DB 20; Length 312;
Best Local Similarity	99.3%; Pred. No. 3.2e-114;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	
Qy	1 MARRSRHRLLLRLYLWALGYHKAYGFSAPKDDQVWTA VXYQEA I LACKT PKKTVKSR 60
Db	1 MARRSRHRLLLRLYLWALGYHKAYGFSAPKDDQVWTA VXYQEA I LACKT PKKTVSSR 60
Qy	61 LEWKKLGRSVSFYFYQQTLOGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEQQN 120
Db	61 LEWKKLGRSVSFYFYQQTLOGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEQQN 120
Qy	121 LEEDTVTLEVLVAPVPSCVPSSALSGTVVELURCQDKEGNPAPEYTWFKDGI RLLLENPR 180
Db	121 LEEDTVTLEVLVAPVPSCVPSSALSGTVVELURCQDKEGNPAPEYTWFKDGI RLLLENPR 180
Qy	181 LGSQSTNSSYTMNTKGTTLQFNVT VSKLDTGEYSCEARN SVGYRRCPGKRMQVDDL NISGI 240
Db	181 LGSQSTNSSYTMNTKGTTLQFNVT VSKLDTGEYSCEARN SVGYRRCPGKRMQVDDL NISGI 240
Qy	241 IAAVWVVALVISVCLGVGYAQRKG YFSKETSFQKSNSSSKATT MSEN 288
Db	241 IAAVWVVALVISVCLGVGYAQRKG YFSKETSFQKSNSSSKATT MSEN 288
RESULT 15	
AA333421	
ID	AA333421 standard; Protein; 312 AA.
XX	AA333421;
XX	29-JAN-2001 (first entry)
XX	Human PRO245 protein UNQ219 SEQ ID NO:36.
XX	Human; immune related disease; diagnosis; antiinflammatory; cardiant;
KW	dermatological; antiarthritic; anti rheumatic; immunosuppressive;
KW	haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
KW	antianemic; hepatotropic; virucide; antipsoriatic; antiallergic;
KW	antistaphylococcal; systemic lupus erythematosus; rheumatoid arthritis;
KW	osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
KW	idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
KW	systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
KW	autoimmune thrombocytopaenia; immune-mediated renal disease;
KW	demyelinating disease; hepatobiliary disease; Whipple's disease;
KW	inflammatory bowel disease; gluten-sensitive enteropathy;
KW	autoimmune disease; immune-mediated skin disease; allergic disease;
KW	immunological disease; transplantation associated disease;
KW	graft rejection; graft-versus-host-disease.
XX	
OS	Homo sapiens.
XX	
PN	WO200053758-A2.
XX	
PD	14-SEP-2000.
XX	
PF	02-MAR-2000; 2000WO-US05841.
XX	
PR	08-MAR-1999; 99WO-US05028.

PR 10-MAR-1999; 99US-0123618.
 PR 12-MAR-1999; 99US-0123957.
 PR 23-MAR-1999; 99US-0125775.
 PR 12-APR-1999; 99US-0128849.
 PR 20-APR-1999; 99WO-US08615.
 PR 28-APR-1999; 99US-0131445.
 PR 04-MAY-1999; 99US-0132371.
 PR 14-MAY-1999; 99US-0134287.
 PR 02-JUN-1999; 99WO-US12252.
 PR 23-JUN-1999; 99US-0141037.
 PR 20-JUL-1999; 99US-0144758.
 PR 26-JUL-1999; 99US-0145698.
 PR 28-JUL-1999; 99US-0146222.
 PR 01-SEP-1999; 99WO-US20111.
 PR 08-SEP-1999; 99WO-US20594.
 PR 13-SEP-1999; 99WO-US20944.
 PR 15-SEP-1999; 99WO-US21090.
 PR 15-SEP-1999; 99WO-US21547.
 PR 05-OCT-1999; 99WO-US23089.
 PR 29-OCT-1999; 99US-0162506.
 PR 29-NOV-1999; 99WO-US28214.
 PR 30-NOV-1999; 99WO-US28313.
 PR 30-NOV-1999; 99WO-US28409.
 PR 01-DEC-1999; 99WO-US28301.
 PR 01-DEC-1999; 99WO-US28634.
 PR 02-DEC-1999; 99WO-US28551.
 PR 02-DEC-1999; 99WO-US28564.
 PR 02-DEC-1999; 99WO-US28565.
 PR 16-DEC-1999; 99WO-US30095.
 PR 20-DEC-1999; 99WO-US30999.
 PR 30-DEC-1999; 99WO-US31274.
 PR 05-JAN-2000; 2000WO-US00219.
 PR 06-JAN-2000; 2000WO-US00277.
 PR 06-JAN-2000; 2000WO-US00376.
 PR 11-FEB-2000; 2000WO-US03565.
 PR 18-FEB-2000; 2000WO-US04341.
 PR 18-FEB-2000; 2000WO-US04342.
 PR 22-FEB-2000; 2000WO-US04414.
 (GETH) GENENTECH INC.

PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
 PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
 PI Stewart TA, Tamas D, Watanabe CK, Wood WI, Yan M;

DR WPI: 2000-572271/53.
 DR N-PSDB; AAC58586.

XX Sixty four PRO polypeptides, useful in the diagnosis and treatment of
 PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
 PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -

PS Claim 33; Fig 16; 309pp; English.

XX The present invention describes sixty four human PRO proteins which can
 CC be used in the treatment of immune related diseases. The human PRO
 CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
 CC treating and diagnosing immune related disorders. The disorders are
 CC selected from systemic lupus erythematosus, rheumatoid arthritis,
 CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
 CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
 CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
 CC anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,
 CC immune-mediated renal disease, demyelinating diseases of the central
 CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
 CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
 CC autoimmune or immune-mediated skin diseases, allergic diseases,
 CC immunological diseases of the lung, and transplantation associated
 CC diseases including graft rejection and graft-versus-host-disease.
 CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
 CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
 CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
 CC sequences given in the exemplification of the present invention.

XX	SQ	Sequence	312 AA;
		Query Match	96.3%; Score 1465; DB 21; Length 312;
		Best Local Similarity	99.3%; Pred. No. 3.2e-114;
		Matches	286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy	1	MARRSRHRLLLLLLRLYLVALGYHKAYGFSAPKDDQQVVTA VYQEA ILACKTPKKT VYKSR	60
Db	1	MARRSRHRLLLLLLRLYLVALGYHKAYGFSAPKDDQQVVTA VYQEA ILACKTPKKT VYSSR	60
Qy	61	LEWKKLGRSVFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON	120
Db	61	LEWKKLGRSVFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQON	120
Qy	121	LEEDTVTLEVLVAPVPSCEVPSSALSGTVVLELRCQDKEGNPAPEYTFWKDGIRLLENPR	180
Db	121	LEEDTVTLEVLVAPVPSCEVPSSALSGTVVLELRCQDKEGNPAPEYTFWKDGIRLLENPR	180
Qy	181	LGSQSTNSSYTMNTKTCTLOFNTVSKLDTG EYSCAARN SVGYRRCPGKRMQVDDLNI SGI	240
Db	181	LGSQSTNSSYTMNTKTCTLOFNTVSKLDTG EYSCAARN SVGYRRCPGKRMQVDDLNI SGI	240
Qy	241	IAAVVVVALVISVCGLGVCYAQRKGYSKETSPOKSNSSSKATTMSN	288
Db	241	IAAVVVVALVISVCGLGVCYAQRKGYSKETSPOKSNSSSKATTMSN	288

Search completed: December 9, 2003, 17:11:12
 Job time : 41.4564 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:10:36 ; Search time 15.5749 Seconds
(without alignments)
809.548 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRHRLLLRLVVA.....SSKATTMSENDFKHTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*

1: /cgn2_6/prodata/1/iaa/5A COMB.pcp.*
2: /cgn2_6/prodata/1/iaa/5B COMB.pcp.*
3: /cgn2_6/prodata/1/iaa/6A COMB.pcp.*
4: /cgn2_6/prodata/1/iaa/6B COMB.pcp.*
5: /cgn2_6/prodata/1/iaa/PCUS COMB.pcp.*
6: /cgn2_6/prodata/1/iaa/backfiles1.pcp.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1517	99.7	298	4	US-09-152-060-76
2	1465	96.3	312	4	US-09-254-465A-9
3	429	28.2	299	3	US-09-188-930-189
4	429	28.2	299	3	US-09-188-930-331
5	429	28.2	299	4	US-09-462-270-2
6	429	28.2	299	4	US-09-254-465A-1
7	429	28.2	299	4	US-09-312-283C-189
8	429	28.2	299	4	US-09-312-283C-331
9	421	27.7	300	4	US-09-254-465A-10
10	399	26.2	260	4	US-09-254-465A-23
11	399	26.2	263	4	US-09-254-465A-25
12	271.5	17.9	205	4	US-09-462-270-4
13	231	15.2	270	4	US-09-254-465A-24
14	231	15.2	273	4	US-09-254-465A-26
15	231	15.2	319	1	US-08-597-495B-22
16	231	15.2	319	3	US-09-068-051A-22
17	231	15.2	319	4	US-09-336-536-67
18	231	15.2	319	4	US-09-254-465A-6
19	219	14.4	318	3	US-09-068-051A-32
20	210	13.8	387	4	US-09-175-928-2
21	202	13.3	390	2	US-08-979-424-1
22	201.5	13.2	394	4	US-09-336-536-39
23	200	13.1	341	4	US-09-336-536-29
24	200	13.1	370	4	US-09-336-536-28
25	196	12.9	365	4	US-09-336-536-40
26	195.5	12.9	352	4	US-09-996-243-505
27	195.5	12.9	365	2	US-08-979-424-3

28	195.5	12.9	365	3	US-09-272-496-2	Sequence 2, Appli
29	191.5	12.6	365	3	US-08-928-383B-2	Sequence 2, Appli
30	183	12.0	249	4	US-09-336-536-42	Sequence 42, Appl
31	183	12.0	365	3	US-08-928-383B-23	Sequence 23, Appl
32	183	12.0	365	3	US-08-928-383B-24	Sequence 24, Appl
33	180	11.8	365	3	US-08-928-383B-26	Sequence 26, Appl
34	178.5	11.7	246	4	US-09-336-536-31	Sequence 31, Appl
35	175.5	11.5	466	4	US-09-604-107A-8	Sequence 8, Appli
36	169.5	11.1	373	4	US-09-996-243-503	Sequence 503, App
37	161.5	10.6	442	4	US-09-778-510-20	Sequence 20, Appl
38	160.5	10.6	805	3	US-08-985-526-34	Sequence 34, Appl
39	160.5	10.6	806	2	US-08-443-861-5	Sequence 5, Appli
40	160.5	10.6	806	3	US-08-193-829B-5	Sequence 5, Appli
41	160.5	10.6	1367	1	US-07-813-593-4	Sequence 4, Appli
42	160.5	10.6	1367	1	US-07-977-451-6	Sequence 6, Appli
43	160.5	10.6	1367	1	US-07-946-507-4	Sequence 4, Appli
44	160.5	10.6	1367	1	US-08-252-517-6	Sequence 6, Appli
45	160.5	10.6	1367	1	US-07-906-397A-6	Sequence 6, Appli

ALIGNMENTS

RESULT 1
US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003PI.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; CURRENT FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,368
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

Query Match 99.7%; Score 1517; DB 4; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.4e-142;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLYLVALGYHKA YGFSAPKQQQVVTAVYQEA LACKTPKKT VXR 60
DB 1 MARRSRHRLLLRLYLVALGYHKA YGFSAPKQQQVVTAVYQEA LACKTPKKT VXR 60
QY 61 LEWKLGSRVSFVYQQTQGGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEQQN 120
DB 61 LEWKLGSRVSFVYQQTQGGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEQQN 120
QY 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
DB 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
QY 181 LGSQSTNSSTMTKTGTLQFNVT VSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240
DB 181 LGSQSTNSSTMTKTGTLQFNVT VSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240
QY 241 IAAVWVVALVISVGLGVCYQAKRGYFSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
DB 241 IAAVWVVALVISVGLGVCYQAKRGYFSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 2

US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; FILE REFERENCE: P1216R1 (US)
; CURRENT APPLICATION NUMBER: US/09/254, 465A
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Query Match 96.3%; Score 1465; DB 4; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.4e-136;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLYLVALGYHKA YGFSAPKQQQVVTAVYQEA LACKTPKKT VXR 60
DB 1 MARRSRHRLLLRLYLVALGYHKA YGFSAPKQQQVVTAVYQEA LACKTPKKT VXR 60
QY 61 LEWKLGSRVSFVYQQTQGGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEQQN 120
DB 61 LEWKLGSRVSFVYQQTQGGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEQQN 120
QY 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
DB 121 LEEDTVTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
QY 181 LGSQSTNSSTMTKTGTLQFNVT VSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240
DB 181 LGSQSTNSSTMTKTGTLQFNVT VSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240

QY 241 IAAVWVVALVISVGLGVCYQAKRGYFSKETSFOKSNSSSKATTMSN 288
DB 241 IAAVWVVALVISVGLGVCYQAKRGYFSKETSFOKSNSSSKATTMSN 288

RESULT 3

US-09-188-930-189
; Sequence 189, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James Greg
; TITLE OF INVENTION: Compositions Isolated From Skin Cells
; FILE REFERENCE: 11000.1011c1
; CURRENT APPLICATION NUMBER: US/09/188,930A
; CURRENT FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 348
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 189
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Human
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (247)...(247)
; NAME/KEY: UNSURE
; LOCATION: (289)...(289)
US-09-188-930-189

Query Match 28.2%; Score 429; DB 3; Length 299;
Best Local Similarity 34.2%; Pred. No. 2.7e-34;
Matches 106; Conservative 50; Mismatches 126; Indels 28; Gaps 8;

QY 2 ARSRHRLLLRLYLVALGYHKA YGFSA-----PKDQVVVTAVYQEA LACKTPK 55
DB 5 AQVERKLLCLFILA LLLCSALGSGVTVHSSEPEVRIPENNPKV KLS CAYS---GFSSP-- 58
QY 56 TVKSRLWK-KLGRSVSFVYQQTQGGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAP 114
DB 59 -----RVWKFDQGDTRLVLCYNKKTASVEDRVTLPCTGTFKSVTREDTGYTCMVS-- 112
QY 115 SEQQNLBEDTVTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIR 174
DB 113 BEGGSYGEVKVLIVLPVPPSKPTVNI PSSATIGNRAVLTCSEQDGSPPSEYTWFKDGIV 172
QY 175 LLENPRLGSSQSTNSSTMTKTGTLQFNVT VSKLDTGEYSCAARNVGYRRCPCGK-RMQVD 233
DB 173 MPTNPKSTRAFSNSSYVLNPTTGELVFDPLSASDTGEYSCAARNVGYTPTMTSNAVRMEAV 232
QY 234 DLNISGI TAAVVVALVISVGLGVCYQAKRGYFSKETSFOKSNSSSKA-----TTMSN 288
DB 233 ERNVGIVAAVLVTXILLGILVFIWFAYSRGHFDT---KKGTSKKVIYQPSARSEX 289
QY 289 DFKHTKSFII 298
DB 290 RFKQTSFSLV 299

RESULT 4

US-09-188-930-331
; Sequence 331, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James Greg


```
Db      233 ERNVGVIAAVALVTLILLGILVGFAYSGRHFDR---KKGTSKKVIYQSPARSSEG 289
Qy      289 DFKHTKSFII 298
Db      290 EFKQTSSFLV 299

RESULT 7
US-09-312-283C-189
; Sequence 189, Application US/09312283C
; Patent No. 6573095
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Orust, Rene
; APPLICANT: Murison, James G.
; APPLICANT: Kumble, Krishanand D.
; TITLE OF INVENTION: Compositions Isolated from Skin Cells
; FILE REFERENCE: 11000.1011c2
; CURRENT APPLICATION NUMBER: US/09/312.283C
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 425
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 189
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Mouse
US-09-312-283C-189

Query Match      28.2%; Score 429; DB 4; Length 299;
Best Local Similarity 34.2%; Pred. No. 2.7e-34;
Matches 106; Conservative 50; Mismatches 126; Indels 28; Gaps 8;

Qy      2 ARSRHRLLLLLRLYLVALGYHKAYGFA-----PKDQOVVTAVXYQAILACKTPKK 55
Db      5 AQVERKLLCLFILAILLCSLALGVSVVHSSPEVRIENPNPKLSAYS-----GFSSP-- 58
Qy      56 TVXSRLEWK-KLGRSVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAP 114
Db      59 ---RVEMKFDQDGTTRLVCYNNKITASYEDRVTFPLPTGITFKSVTRDTGTTCMVS-- 112
Qy      115 SEQONLEEDTVTLVLVAVAPVSCPSSALSGTVVLRQDKEGNPAPEYTWFKDGIR 174
Db      113 EEGNSYGEVKVLIVLPSPKPTVNPSSATIGNRAVLTCSEQDGGPPSEYTWFKDGIV 172
Qy      175 LLENPRLGSSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGK-RMQVD 233
Db      173 MPTNPKSTRAFSNSSYVLPPTTGGELVDFPLASDTGEYSCEARNGYGTPTMTSNAVRMEAV 232
Qy      234 DLNISGIIAAVVVALVISVCGLVCAQRKGYSKTSFKQSNSSKA-----TTWSEN 288
Db      233 ERNVGVIAAVALVTLILLGILVGFAYSGRHFDR---KKGTSKKVIYQSPARSSEG 289
Qy      289 DFKHTKSFII 298
Db      290 EFKQTSSFLV 299

RESULT 8
US-09-312-283C-331
; Sequence 331, Application US/09312283C
; Patent No. 6573095
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Orust, Rene
; APPLICANT: Murison, James G.
; APPLICANT: Kumble, Krishanand D.
; TITLE OF INVENTION: Compositions Isolated from Skin Cells
```

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; TITLE OF INVENTION: and Methods for Their Use
; FILE REFERENCE: 11000.1011c2
; CURRENT APPLICATION NUMBER: US/09/312.283C
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 425
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 331
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Mouse
US-09-312-283C-331

Query Match      28.2%; Score 429; DB 4; Length 299;
Best Local Similarity 34.2%; Pred. No. 2.7e-34;
Matches 106; Conservative 50; Mismatches 126; Indels 28; Gaps 8;

Qy      2 ARSRHRLLLLLRLYLVALGYHKAYGFA-----PKDQOVVTAVXYQAILACKTPKK 55
Db      5 AQVERKLLCLFILAILLCSLALGVSVVHSSPEVRIENPNPKLSAYS-----GFSSP-- 58
Qy      56 TVXSRLEWK-KLGRSVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAP 114
Db      59 ---RVEMKFDQDGTTRLVCYNNKITASYEDRVTFPLPTGITFKSVTRDTGTTCMVS-- 112
Qy      115 SEQONLEEDTVTLVLVAVAPVSCPSSALSGTVVLRQDKEGNPAPEYTWFKDGIR 174
Db      113 EEGNSYGEVKVLIVLPSPKPTVNPSSATIGNRAVLTCSEQDGGPPSEYTWFKDGIV 172
Qy      175 LLENPRLGSSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGK-RMQVD 233
Db      173 MPTNPKSTRAFSNSSYVLPPTTGGELVDFPLASDTGEYSCEARNGYGTPTMTSNAVRMEAV 232
Qy      234 DLNISGIIAAVVVALVISVCGLVCAQRKGYSKTSFKQSNSSKA-----TTWSEN 288
Db      233 ERNVGVIAAVALVTLILLGILVGFAYSGRHFDR---KKGTSKKVIYQSPARSSEG 289
Qy      289 DFKHTKSFII 298
Db      290 EFKQTSSFLV 299

RESULT 9
US-09-254-465A-10
; Sequence 10, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; FILE REFERENCE: P1216R1 (US)
; CURRENT APPLICATION NUMBER: US/09/254.465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 10
; LENGTH: 300
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-254-465A-10
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Db 127 LVPPSKPCGIEGTTIIGNNIQLTCSKESGPTQYSWKRYNILNQEQLAQPASGPVS 186
Qy 191 TMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS-----GIIA 242
Db 187 LKNISTDT-----SGYICTSSNEEGTQFCNITVAVRSPSMNVALVYGVIAVGVA 236
Qy 243 AVVVVALVISVC 254
Db 237 ALIIIGIIYYCC 248

RESULT 15
US-08-597-495B-22
; Sequence 22, Application US/08597495B
; Patent No. 5712369
; GENERAL INFORMATION:
; APPLICANT: Old, Lloyd J.; Welt, Sydney; Ritter, Gerd;
; APPLICANT: Simpson, Richard J.; Nice, Edouard; Moritz, R. L.;
; APPLICANT: Catimel, B.; Ji, Hong; Burgess, Anthony W.;
; APPLICANT: Heath, Joan K.; White, Sara J.; Johnstone, Cameron
; TITLE OF INVENTION: Colon Cell And Colon Cancer Cell
; TITLE OF INVENTION: Associated Nucleic Acid Molecules, Protein And Peptides
; NUMBER OF SEQUENCES: 29
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Felfe & Lynch
; STREET: 805 Third Avenue
; CITY: New York City
; STATE: New York
; COUNTRY: USA
; ZIP: 10022
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 360 kb storage
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: Wordperfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/597.495B
; FILING DATE: 02-Feb-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/511,876
; FILING DATE: 04-Aug-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Hanson, No. 5712369man D.
; REGISTRATION NUMBER: 30,946
; REFERENCE/DOCKET NUMBER: LUD 5316.1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 688-9200
; TELEFAX: (212) 838-3884
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 319 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
US-08-597-495B-22

Query Match 15.2%; Score 231; DB 1; Length 319;
Best Local Similarity 28.6%; Pred. No. 1.1e-14;
Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
Qy 30 SAPKQQQVTVAVYQYAILACKTPKTVXSR---LEWKKL-----GRSVSFVYYQQT-LQ 80
Db 23 SVETPDVLRASQGSVTLPC-TVHTSTSSREGLIQWDKLLTHTERVVIVPFSKNKYIH 81
Qy 81 GD-FKNR-----AEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDT---VTLEV 130
Db 82 GELYKRVISINNAEOSDASITIDQLTMADNGTYECSVLSMD-----LEGNTKSRVRLV 137
Qy 131 LVAPVPSCEVPSSALSGTVVELRCQDKGNPAPEYTWFKDGIRLLENPRLGSGSTNSSY 190
Db 138 LVPPSKPCGIEGTTIIGNNIQLTCSKESGPTQYSWKRYNILNQEQLAQPASGPVS 197

Qy 191 TMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS-----GIIA 242
Db 198 LKNISTDT-----SGYICTSSNEEGTQFCNITVAVRSPSMNVALVYGVIAVGVA 247
Qy 243 AVVVVALVISVC 254
Db 248 ALIIIGIIYYCC 259
Search completed: December 9, 2003, 17:14:23
Job time : 17.5749 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:13:07 ; Search time 27.5157 Seconds
(without alignments)
2014.238 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRRLRLRLRLVLA.....SSKATTMSDFKHKTSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 684280 seqs, 185983659 residues

Total number of hits satisfying chosen parameters: 684280

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
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- 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 17: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1518	99.8	298	9	US-09-745-763-38
2	1518	99.8	298	9	US-09-799-777-30
3	1518	99.8	298	15	US-10-139-849-2
4	1518	99.8	298	16	US-10-192-791-2
5	1517	99.7	298	9	US-09-853-161-76
6	1517	99.7	298	9	US-09-852-659A-76
7	1517	99.7	298	10	US-09-852-797-76
8	1465	96.3	312	10	US-09-909-320-64
9	1465	96.3	312	10	US-09-909-088B-64
10	1465	96.3	312	10	US-09-905-291A-64
11	1465	96.3	312	10	US-09-953-499-9
12	1465	96.3	312	10	US-09-902-853-64
13	1465	96.3	312	10	US-09-907-824-64
14	1465	96.3	312	10	US-09-907-841-64
15	1465	96.3	312	11	US-09-904-011-64

16	1465	96.3	312	11	US-09-906-742-64	Sequence 64, Appl
17	1465	96.3	312	11	US-09-906-838-64	Sequence 64, Appl
18	1465	96.3	312	11	US-09-907-613-64	Sequence 64, Appl
19	1465	96.3	312	11	US-09-907-942-64	Sequence 64, Appl
20	1465	96.3	312	11	US-09-904-859-64	Sequence 64, Appl
21	1465	96.3	312	11	US-09-909-204-64	Sequence 64, Appl
22	1465	96.3	312	11	US-09-904-820-64	Sequence 64, Appl
23	1465	96.3	312	11	US-09-904-786-64	Sequence 64, Appl
24	1465	96.3	312	11	US-09-906-646-64	Sequence 64, Appl
25	1465	96.3	312	11	US-09-906-700-64	Sequence 64, Appl
26	1465	96.3	312	11	US-09-903-786-64	Sequence 64, Appl
27	1465	96.3	312	11	US-09-902-903-64	Sequence 64, Appl
28	1465	96.3	312	11	US-09-903-749A-64	Sequence 64, Appl
29	1465	96.3	312	11	US-09-904-119-64	Sequence 64, Appl
30	1465	96.3	312	11	US-09-904-956-64	Sequence 64, Appl
31	1465	96.3	312	11	US-09-902-736-64	Sequence 64, Appl
32	1465	96.3	312	11	US-09-907-794-64	Sequence 64, Appl
33	1465	96.3	312	11	US-09-903-943-64	Sequence 64, Appl
34	1465	96.3	312	11	US-09-904-462-64	Sequence 64, Appl
35	1465	96.3	312	11	US-09-907-925-64	Sequence 64, Appl
36	1465	96.3	312	11	US-09-902-692-64	Sequence 64, Appl
37	1465	96.3	312	11	US-09-903-520-64	Sequence 64, Appl
38	1465	96.3	312	11	US-09-905-056-64	Sequence 64, Appl
39	1465	96.3	312	11	US-09-909-064-64	Sequence 64, Appl
40	1465	96.3	312	11	US-09-904-553-64	Sequence 64, Appl
41	1465	96.3	312	11	US-09-905-381-64	Sequence 64, Appl
42	1465	96.3	312	11	US-09-905-088-64	Sequence 64, Appl
43	1465	96.3	312	11	US-09-907-575-64	Sequence 64, Appl
44	1465	96.3	312	11	US-09-905-075-64	Sequence 64, Appl
45	1465	96.3	312	11	US-09-902-759-64	Sequence 64, Appl

ALIGNMENTS

RESULT 1

US-09-745-763-38

; Sequence 38, Application US/09745763

; Patent No. US20020065394A1

; GENERAL INFORMATION:

APPLICANT: Jacobs, Kenneth

McCoy, John M.

LaVallie, Edward R.

Collins-Racie, Lisa A.

Evans, Cheryl

Merberg, David

Treacy, Maurice

Spaulding, Vikki

TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES

ENCODING THEM

NUMBER OF SEQUENCES: 219

CORRESPONDENCE ADDRESS:

ADDRESSEE: Genetics Institute, Inc.

STREET: 87 CambridgePark Drive

CITY: Cambridge

STATE: MA

COUNTRY: U.S.A.

ZIP: 02140

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/745,763

FILING DATE: 18-Jun-2000

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Sprunger, Suzanne A.

REGISTRATION NUMBER: 41,323

TELECOMMUNICATION INFORMATION:

TELEPHONE: (617) 498-8284

TELEFAX: (617) 876-5851

```
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; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 298 amino acids
;   TYPE: amino acid
;   STRANDEDNESS: <Unknown>
;   TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

Query Match          99.8%; Score 1518; DB 9; Length 298;
Best Local Similarity 99.3%; Pred. No. 9.8e-136;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  1 MARRSRHRLLLLLRYLVVALGYHKAYGFSAPKDOQVVTAVYQEAAILACKTPKKTVXSR 60
Db  1 MARRSRHRLLLLLRYLVVALGYHKAYGFSAPKDOQVVTAVYQEAAILACKTPKKTVSSR 60

QY  61 LEWKKLGRSVSFVYVYQQTLLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGN 120
Db  61 LEWKKLGRSVSFVYVYQQTLLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGN 120

QY  121 LBEEDTVTLVLVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db  121 LBEEDTVTLVLVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY  181 LGSQSTNSSTYNTKTGTLOFNVTSKLDTGEVSCSEARNVGYRRCPCGKMQVDDNLNISI 240
Db  181 LGSQSTNSSTYNTKTGTLOFNVTSKLDTGEVSCSEARNVGYRRCPCGKMQVDDNLNISI 240

QY  241 IAAVVVVALVISVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMTSENDFKHTKSFII 298
Db  241 IAAVVVVALVISVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMTSENDFKHTKSFII 298

RESULT 2
US-09-799-777-30
; Sequence 30, Application US/09799777
; Patent No. US20020091244A1
; GENERAL INFORMATION:
; APPLICANT: Lal, Preeti
; Hillman, Jennifer L.
; Corley, Neil C.
; Guegler, Karl J.
; Baugh, Mariah
; Sather, Susan
; Shah, Purvi
; TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS
; NUMBER OF SEQUENCES: 154
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3174 PORTER DRIVE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/799,777
; FILING DATE: 06-Mar-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/002,485
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: BILLINGS, LUCY J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0459 US
; TELECOMMUNICATION INFORMATION:

;
; TELEPHONE: (650) 855-0555
; TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 298 amino acids
;   TYPE: amino acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: DUODNOT02
; CLONE: 1704050
; SEQUENCE DESCRIPTION: SEQ ID NO: 30 :
US-09-799-777-30

Query Match          99.8%; Score 1518; DB 9; Length 298;
Best Local Similarity 99.3%; Pred. No. 9.8e-136;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  1 MARRSRHRLLLLLRYLVVALGYHKAYGFSAPKDOQVVTAVYQEAAILACKTPKKTVXSR 60
Db  1 MARRSRHRLLLLLRYLVVALGYHKAYGFSAPKDOQVVTAVYQEAAILACKTPKKTVSSR 60

QY  61 LEWKKLGRSVSFVYVYQQTLLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGN 120
Db  61 LEWKKLGRSVSFVYVYQQTLLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGN 120

QY  121 LBEEDTVTLVLVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db  121 LBEEDTVTLVLVAPVSPCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY  181 LGSQSTNSSTYNTKTGTLOFNVTSKLDTGEVSCSEARNVGYRRCPCGKMQVDDNLNISI 240
Db  181 LGSQSTNSSTYNTKTGTLOFNVTSKLDTGEVSCSEARNVGYRRCPCGKMQVDDNLNISI 240

QY  241 IAAVVVVALVISVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMTSENDFKHTKSFII 298
Db  241 IAAVVVVALVISVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMTSENDFKHTKSFII 298

RESULT 3
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barros, Maria Pia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rockey, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:
```

TELEPHONE: 312-616-5400
TELEFAX: 312-616-5460
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

Query Match 99.8%; Score 1518; DB 15; Length 298;
Best Local Similarity 99.3%; Pred. No. 9.8e-136;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLLRLLVVALGYHAYGFSAPKDDQVVTAQYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHRLLLLRLLVVALGYHAYGFSAPKDDQVVTAQYQEAAILACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKQEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKQEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240
Db 181 LGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240
Qy 241 IAAVVVVALVSVCGLVGYAQRKGYSKTSFQKSNSSSKATTMSNDFKHTKSFII 298
Db 241 IAAVVVVALVSVCGLVGYAQRKGYSKTSFQKSNSSSKATTMSNDFKHTKSFII 298

RESULT 4
US-10-192-791-2
; Sequence 2, Application US/10192791
; Publication No. US20030130166A1
; GENERAL INFORMATION:
; APPLICANT: Texas Biotechnology Corporation
; TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (JA
; FILE REFERENCE: TEX4542P0430
; CURRENT APPLICATION NUMBER: US/10/192,791
; CURRENT FILING DATE: 2003-12-10
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-192-791-2

Query Match 99.8%; Score 1518; DB 16; Length 298;
Best Local Similarity 99.3%; Pred. No. 9.8e-136;
Matches 296; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLLRLLVVALGYHAYGFSAPKDDQVVTAQYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHRLLLLRLLVVALGYHAYGFSAPKDDQVVTAQYQEAAILACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKQEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKQEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240
Db 181 LGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240

Qy 241 IAAVVVVALVSVCGLVGYAQRKGYSKTSFQKSNSSSKATTMSNDFKHTKSFII 298
Db 241 IAAVVVVALVSVCGLVGYAQRKGYSKTSFQKSNSSSKATTMSNDFKHTKSFII 298

RESULT 5
US-09-853-161-76
; Sequence 76, Application US/09853161
; Patent No. US20020076756A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; CURRENT APPLICATION NUMBER: US/09/853,161
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match 99.7%; Score 1517; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-135;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLLRLLVVALGYHAYGFSAPKDDQVVTAQYQEAAILACKTPKKTYSR 60
Db 1 MARRSRHRLLLLRLLVVALGYHAYGFSAPKDDQVVTAQYQEAAILACKTPKKTYSR 60
Qy 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKQEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRCDKQEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240
Db 181 LGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDLNISGI 240

Db 181 LGSQSTNSSVTWNTKGTTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNI SGI 240
QY 241 IAAVVVALVISVCGGLGVCAQKRGYFSKETSFKQKSNSSSKATTMSNDPKHTKSFII 298
Db 241 IAAVVVALVISVCGGLGVCAQKRGYFSKETSFKQKSNSSSKATTMSNDPKHTKSFII 298

RESULT 6

US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US20020077287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; CURRENT APPLICATION NUMBER: US/09/852,659A
; FILE REFERENCE: P2003P4
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76

Query Match 99.7%; Score 1517; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-135;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHLLLLRLYLVALGYHKAYGFSAPKDDQVVAVXYQBAIIACKTPKKTVXSR 60
Db 1 MARRSRHLLLLRLYLVALGYHKAYGFSAPKDDQVVAVXYQBAIIACKTPKKTVXSR 60
QY 61 LEWKGLGRSVFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYCEVSAPSEQQN 120
Db 61 LEWKGLGRSVFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYCEVSAPSEQQN 120
QY 121 LEEDTVTLVLVAPVPSCVPSALSCTGVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTVTLVLVAPVPSCVPSALSCTGVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

QY 181 LGSQSTNSSVTWNTKGTTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNI SGI 240
Db 181 LGSQSTNSSVTWNTKGTTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNI SGI 240
QY 241 IAAVVVALVISVCGGLGVCAQKRGYFSKETSFKQKSNSSSKATTMSNDPKHTKSFII 298
Db 241 IAAVVVALVISVCGGLGVCAQKRGYFSKETSFKQKSNSSSKATTMSNDPKHTKSFII 298

RESULT 7

US-09-852-797-76
; Sequence 76, Application US/09852797
; Patent No. US20020172994A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.7%; Score 1517; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-135;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHLLLLRLYLVALGYHKAYGFSAPKDDQVVAVXYQBAIIACKTPKKTVXSR 60
Db 1 MARRSRHLLLLRLYLVALGYHKAYGFSAPKDDQVVAVXYQBAIIACKTPKKTVXSR 60
QY 61 LEWKGLGRSVFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYCEVSAPSEQQN 120
Db 61 LEWKGLGRSVFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYCEVSAPSEQQN 120
QY 121 LEEDTVTLVLVAPVPSCVPSALSCTGVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTVTLVLVAPVPSCVPSALSCTGVVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRCPGKRMQVDDLNISGI 240
Qy 241 IAAVVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFI 298
Db 241 IAAVVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFI 298

RESULT 8

US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; PRIOR FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16

; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-320-64

Query Match 96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLRLRYLVWALGYHKAYGFSAPKDDQVVTA VXYQEA LACKTPKKT VXR 60
Db 1 MARRSRHRLLLRLRYLVWALGYHKAYGFSAPKDDQVVTA VXYQEA LACKTPKKT VXR 60
Qy 61 LEWKKLGRSVFVYVYQOTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120
Db 61 LEWKKLGRSVFVYVYQOTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120
Qy 121 LEEDTVTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTVTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNVGYRCPGKRMQVDDLNISGI 240
Qy 241 IAAVVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSN 288
Db 241 IAAVVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSN 288

RESULT 9

US-09-909-088B-64
; Sequence 64, Application US/09909088B
; Patent No. US20020146709A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,088B
; CURRENT FILING DATE: 2001-07-18

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; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64

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Query Match 96.3%; Score 1465; DB 10; Length 312;

Best Local Similarity 99.3%; Pred. No. 1.le-130;

Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy 1 MARRSRHLLLLRLVVALGYHKAYGFSAPKQQVVTVXYQEAAILACKTPKKTVXSR 60
   |||||
Db 1 MARRSRHLLLLRLVVALGYHKAYGFSAPKQQVVTVXYQEAAILACKTPKKTVSSR 60
   |||||

Qy 61 LEWKGLGRSVFVYQQTLOGDEKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
   |||||
Db 61 LEWKGLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
   |||||

Qy 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGPNAPETWFKDGIRLLENPR 180
   |||||
Db 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGPNAPETWFKDGIRLLENPR 180
   |||||

Qy 181 LGSOSTSSVTMNTKTGTQLQNTVSKLDTGYSCAARNVGYRRCPCGHRMQVDLNTSGI 240
   |||||
Db 181 LGSOSTSSVTMNTKTGTQLQNTVSKLDTGYSCAARNVGYRRCPCGHRMQVDLNTSGI 240
   |||||

Qy 241 IAAVVVVALVSVGLGVCAQRKGYSKETSFKQSNSSSKATTMSN 288
   |||||
Db 241 IAAVVVVALVSVGLGVCAQRKGYSKETSFKQSNSSSKATTMSN 288
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RESULT 10

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US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi

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Query Match 96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.le-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; CURRENT FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64

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Qy 1 MARSRHRLLLRLYLVALGYHAYGFSAPKDDQVVTVAVXYQEAIALCKTPKKTVXSR 60
Db 1 MARSRHRLLLRLYLVALGYHAYGFSAPKDDQVVTVAVXYQEAIALCKTPKKTVXSR 60
Qy 61 LEWKLGSRVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120
Db 61 LEWKLGSRVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120
Qy 121 LEEDTTLVLVAPVPSCVPSALSCTVVELRCODKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVPSCVPSALSCTVVELRCODKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTSSYTMNTKTGTLQFNTVSKLDTGYSCEARNVSVYRRCPGKRMQVDDLNTSGI 240
Db 181 LGSQSTSSYTMNTKTGTLQFNTVSKLDTGYSCEARNVSVYRRCPGKRMQVDDLNTSGI 240
Qy 241 IAAVVVALVSVCGLVGYCAQRKGYSFKTSFQKSNSSSKATTMSN 288
Db 241 IAAVVVALVSVCGLVGYCAQRKGYSFKTSFQKSNSSSKATTMSN 288

RESULT 11

US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P121GRI (US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR FILING DATE: 1999-03-05
; PRIOR FILING DATE: 1998-11-20
; PRIOR FILING DATE: 1997-11-21
; PRIOR FILING DATE: 1998-03-20
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

Query Match 96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARSRHRLLLRLYLVALGYHAYGFSAPKDDQVVTVAVXYQEAIALCKTPKKTVXSR 60
Db 1 MARSRHRLLLRLYLVALGYHAYGFSAPKDDQVVTVAVXYQEAIALCKTPKKTVXSR 60
Qy 61 LEWKLGSRVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120
Db 61 LEWKLGSRVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120
Qy 121 LEEDTTLVLVAPVPSCVPSALSCTVVELRCODKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVPSCVPSALSCTVVELRCODKEGNPAPEYTWFKDGIRLLENPR 180
Qy 181 LGSQSTSSYTMNTKTGTLQFNTVSKLDTGYSCEARNVSVYRRCPGKRMQVDDLNTSGI 240

Db 181 LGSQSTSSYTMNTKTGTLQFNTVSKLDTGYSCEARNVSVYRRCPGKRMQVDDLNTSGI 240
Qy 241 IAAVVVALVSVCGLVGYCAQRKGYSFKTSFQKSNSSSKATTMSN 288
Db 241 IAAVVVALVSVCGLVGYCAQRKGYSFKTSFQKSNSSSKATTMSN 288

RESULT 12

US-09-902-853-64
; Sequence 64, Application US/09902853
; Publication No. US20020192659A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Geritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/902,853
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: US/09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20

; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-902-853-64

Query Match 96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKQOOVVTA VYQEA I LACKTPKKT VYXR 60
Db 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKQOOVVTA VYQEA I LACKTPKKT VYSSR 60

Qy 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120
Db 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120

Qy 121 LEEDTTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy 181 LGSQSTNSYTMNTKTGTQLQNTVSKLDTGEYSCARNVGVYRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSYTMNTKTGTQLQNTVSKLDTGEYSCARNVGVYRCPGKRMQVDDLNISGI 240

Qy 241 IAAVVVALVISVCGLVGYAQRKGYSKTSFKSNSSSKATTMSN 288
Db 241 IAAVVVALVISVCGLVGYAQRKGYSKTSFKSNSSSKATTMSN 288

RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18

; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64

Query Match 96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKQOOVVTA VYQEA I LACKTPKKT VYXR 60
Db 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKQOOVVTA VYQEA I LACKTPKKT VYSSR 60

Qy 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120
Db 61 LEWKLGSRVSFVYVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQON 120

Qy 121 LEEDTTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180
Db 121 LEEDTTLVLVAPVPSCVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPR 180

Qy 181 LGSQSTNSYTMNTKTGTQLQNTVSKLDTGEYSCARNVGVYRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSYTMNTKTGTQLQNTVSKLDTGEYSCARNVGVYRCPGKRMQVDDLNISGI 240

Qy 241 IAAVVVALVISVCGLVGYAQRKGYSKTSFKSNSSSKATTMSN 288
Db 241 IAAVVVALVISVCGLVGYAQRKGYSKTSFKSNSSSKATTMSN 288

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi

```

; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; CURRENT FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match      96.3%; Score 1465; DB 10; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1  MARRSRRLRLLLRLYLVLVALGYHKA YGFSAPKDDQVVTAVYQEA I LACKTPKKT VYKSR 60
Db      1  MARRSRRLRLLLRLYLVLVALGYHKA YGFSAPKDDQVVTAVYQEA I LACKTPKKT VYSSR 60
QY      61  LEWKLGSRSVFYVYQTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEV SAPSEQQN 120
Db      61  LEWKLGSRSVFYVYQTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEV SAPSEQQN 120
QY      121  LEEDT VTLVLA PAVPSCVPSSALSGT VVELRCQDKEGNPAPEYTWFKD GRLLENPR 180
Db      121  LEEDT VTLVLA PAVPSCVPSSALSGT VVELRCQDKEGNPAPEYTWFKD GRLLENPR 180
QY      181  LGSQSTNSSYTMNTKGT LQFNTVSKLDTGEYSCEARNSVG YRRCPCGKMQVDDL NISGI 240

; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
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; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      96.3%; Score 1465; DB 11; Length 312;
Best Local Similarity 99.3%; Pred. No. 1.1e-130;
Matches 286; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1 MARRSRHRLLLLLRLVVLVALGYHKAYGFSAPKDDQOVTVAVYQEAAILACKTPKKTVXSR 60
Db      1 MARRSRHRLLLLLRLVVLVALGYHKAYGFSAPKDDQOVTVAVYQEAAILACKTPKKTVSSR 60

QY      61 LEWKKLGRSVSFYVYQQTLLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGON 120
Db      61 LEWKKLGRSVSFYVYQQTLLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGON 120

QY      121 LEEDTVTLEVLVAPVPSCVPSSALSGTVVELRCQDKEGNAPEYTFWFKDGIRLLENPR 180
Db      121 LEEDTVTLEVLVAPVPSCVPSSALSGTVVELRCQDKEGNAPEYTFWFKDGIRLLENPR 180

QY      181 LGSQSTNSSYTNWTKTGTLOFNTVSKLDTGEYSCEARNVSGYRRCPCGKMQVDDNLNISI 240
Db      181 LGSQSTNSSYTNWTKTGTLOFNTVSKLDTGEYSCEARNVSGYRRCPCGKMQVDDNLNISI 240

QY      241 IAAVVVVALVISVCGLVGYAQRKGYSKETSFKSNSSSKATTWSEN 288
Db      241 IAAVVVVALVISVCGLVGYAQRKGYSKETSFKSNSSSKATTWSEN 288
```

Search completed: December 9, 2003, 17:22:01
Job time : 29.5157 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:09:51 ; Search time 15.0557 Seconds
(without alignments)
1903.477 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRRLRLRLRLVLA.....SSKATTSEDFKTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283308 seqs, 96168682 residues

Total number of hits satisfying chosen parameters: 283308

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : PIR_76:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	429	28.2	299	S56749	junctional adhesio
2	201.5	13.2	365	JC7780	coxsackie- and ade
3	186	12.2	811	A41054	fasciclin II, tran
4	186	12.2	873	B41054	protein UNC-89 - C
5	171	11.2	6642	T29757	elastic titin - hu
6	163.5	10.7	7962	I38346	protein-tyrosine k
7	160.5	10.6	1367	A41228	nonspecific cross-
8	157	10.3	344	A27681	ErbB kinase activa
9	157	10.3	860	JC5702	ErbB kinase activa
10	157	10.3	868	JC5701	leukocyte antigen-
11	156	10.3	1897	TDHULK	hypothetical prote
12	155.5	10.2	1328	T23007	hypothetical prote
13	155.5	10.2	2783	T34416	neural cell adhesi
14	155	10.2	725	JE0100	ErbB kinase activa
15	155	10.2	850	JC5700	biliary glycoprote
16	153.5	10.1	521	JC1508	hypothetical prote
17	152	10.0	773	T46283	hemocentin precurs
18	152	10.0	5175	T20992	cell adhesion prot
19	152	10.0	5198	T43290	neural cell adhesi
20	151.5	10.0	1033	S19247	protein-tyrosine-p
21	151	9.9	1092	JUN0635	leukocyte antigen-
22	151	9.9	1501	T58148	biliary glycoprote
23	151	9.9	1863	S46217	protein-tyrosine-p
24	151	9.9	1898	S46216	biliary glycoprote
25	150.5	9.9	521	S34338	protein-tyrosine-p
26	150	9.9	1499	T50212	hypothetical prote
27	150	9.9	1907	S50893	ecto-ATPase precur
28	149.5	9.8	352	T33433	
29	148.5	9.8	519	A44783	

RESULT 1

S56749

junctional adhesion molecule precursor - human

N:Alternate names: F11 platelet antigen; platelet adhesion molecule PAM-1; platelet F11
C:Species: Homo sapiens (man)
C>Date: 27-Oct-1995 #sequence_revision 01-Feb-2002 #text_change 01-Feb-2002

R/Ozaki, H.; Ishii, K.; Horiuchi, H.; Arai, H.; Kawamoto, T.; Okawa, K.; Iwamatsu, A.;
J. Immunol. 163, 553-557, 1999

A:Title: Cutting edge: combined treatment of TNF-alpha and IFN-gamma causes redistribut:
A:Reference number: A59406; MUID:99323940; PMID:10395639

A:Accession: A59406

A>Status: preliminary

A:Molecule type: DNA

A:Residues: 1-299 <OZA>

A:Cross-references: GB:AA42050; NID:G5326797; PIDN:AA42050.1

R:Naik, U.P.; Ehrlich, Y.H.; Kornecki, E.
Biochem. J. 310, 155-162, 1995

A:Title: Mechanisms of platelet activation by a stimulatory antibody: cross-linking of
A:Reference number: S56749; MUID:95374438; PMID:7646439

A:Accession: S56749

A:Molecule type: protein

A:Residues: 28-49, 'X', 51-53; 62-73, 'E', 75-103; 123, 'F', 125-130, 'FQDKXTIYLNXY'; 'LT', 206, 'X'
A>Note: the order of the peptides other than the amino terminus was not determined

C:Genetics: JAM

C:Keywords: glycoprotein; phosphoprotein; platelet aggregation; platelet membrane

F:1-25/Domain: signal sequence #status predicted <SIG>
F:26-299/Product: junctional adhesion molecule #status predicted <MAT>

Query Match 28.2%; Score 429; DB 2; Length 299;

Best Local Similarity 34.2%; Pred. No. 5.2e-27;

Matches 106; Conservative 50; Mismatches 126; Indels 28; Gaps 8;

QY 2 ARSRHRLRLRLRLVLAALGTHKAYGFA-----PKDQVTVAVXQBAIACKTPKK 55

Db 5 AQVERKLLCLFLAILLCLSGALGSVTVHSSEPRIPENNPVKLSAYS----GFSSP-- 58

QY 56 TVKSLRWK-KLGRSVSVFYVQTLQGDFFKRAEMIDFNIRIKNVTRESDAGKRCVSAP 114

Db 59 ----RVWKFQDQDTRLVLCYNKKTASTYEDRVTLFTGTFKSVTREDTGYTCMVS-- 112

QY 115 SEQGNLEEDTVTLEVLNAPVPSCEVPSALSGTVLRLCQDKENGAPEYTFWFDGIR 174

Db 113 BEGGSYGVKVLIVLPSPKPTVNPSSAIGNRAVLTCSEQDGPSEYTFWFDGIV 172

QY 175 LLENPLGQSQTNSSTYMTTKGTQFNVTVKLDTGEYSCEARNVGVYRCPGK-RMQVD 233

Db 173 MPTNPKSTRAFNSNSYVLPNTTGLVDFPLSADTGEYSCEARNGYGTPTMNAVRMEAV 232

QY 234 DLNIGSIIAAVVVVVALVISVCGLVGYAQRKCYFSKETSFKNSSSSKA-----TTMSEN 288

ALIGNMENTS

Qy	155	QDKEGNPAPEYTWFKDGIIRLENPRLGSSQSTNSSYTMNTKTGTLQFNVTSKLDTGEYSC	214
Db	2765	CQ-VAGTPEITVSWYKGDTKLRPTPEYRTYFTNN-----VATLVFNKVNINDSGEYTC	281
Qy	215	EARNISVG	221
Db	2817	KAENSIG	2823
RESULT 7			
protein-tyrosine kinase (EC 2.7.1.112) Flk-1 precursor, endothelial cell-specific			
C:Species: Mus musculus (house mouse)			
C:Date: 19-Jun-1992 #sequence revision 19-Jun-1992 #text_change 04-Feb-2000			
C:Accession: A41228; A46065; I58365; S18832; S29991			
R:Matthews, W.; Jordan, C.T.; Gavin, M.; Jenkins, N.A.; Copeland, N.G.; Lemisch			
Proc. Natl. Acad. Sci. U.S.A. 88, 9028-9030, 1991			
A:Title: A receptor tyrosine kinase cDNA isolated from a population of enriched			
A:Reference number: A41228; MUID:92020984; PMID:1717995			
A:Accession: A41228			
A>Status: preliminary			
A:Molecule type: mRNA			
A:Residues: 1-1367 <WAT>			
A:Cross-references: GB:X59337; NID:G50976; PIDN:CAA42040.1; PID:G50977			
R:Millauer, B.; Mizigmann-Voos, S.; Schnurch, H.; Martinez, R.; Moller, N.P.; R;			
Cell 72, 835-846, 1993			
A:Title: High affinity VEGF binding and developmental expression suggest Flk-1			
A:Reference number: A46065; MUID:9208880; PMID:7691362			
A:Accession: A46065			
A>Status: preliminary; not compared with conceptual translation			
A:Molecule type: mRNA			
A:Residues: 1-24, 'T', 26-782, 'VL', 785-916, 'C', 918-1367 <MIL>			
A:Cross-references: GB:X70842; NID:G57923; PIDN:CAA50192.1; PID:G57924			
A:Note: submitted to the EMBL Data Library, January 1993			
A:Note: sequence extracted from NCBI backbone (NCBIP:128064)			
R:Oelrichs, R.B.; Reid, H.H.; Bernard, O.; Ziemlecki, A.; Wilks, A.F.			
Oncogene 8, 11-18, 1993			
A:Title: LYK/FLK-1: a putative receptor protein tyrosine kinase isolated from E			
A:Reference number: I58365; MUID:93141255; PMID:8423988			
A:Accession: I58365			
A>Status: preliminary; translated from GB/EMBL/DBDJB			
A:Molecule type: mRNA			
A:Residues: 1-678, 'D', 680-1340, 'RSPPV' 			
A:Cross-references: GB:S53103; NID:G264004; PIDN:AAB25043.1; PID:G264005			
C:Genetics:			
A:Gene: FLK-1; NYK			
C:Superfamily: unassigned Ser/Thr or Tyr-specific protein kinases; protein kinase			
C:Keywords: ATP; autophosphorylation; phosphoprotein; phosphotransferase; trans			
F:830-1165/Domain: protein kinase homology <KIN>			
F:838-846/Region: protein kinase ATP-binding motif			
Query Match 10.6%; Score 160.5; DB 2; Length 1367;			
Best Local Similarity 24.8%; Pred. No. 0.00011;			
Matches 53; Conservative 23; Mismatches 75; Indels 63; Gaps 6;			
Qy	44	QEAILACKTPKTVXSRLEWKKLGRSVSFVYQOQTQGDGFNRAEMIDFN-----	93
Db	562	QESVLLCTADRNFTFENLTWYKLGSOATSVHMGESLTPVCKNLDALWKLNGTWFNSNTD	621
Qy	94	---IRIKNVTNRSDAGKYRC-----EVSAPSEGCQNLIEDTWTLEV	130
Db	622	ILIVAFQNASLQDQGYVCSAQDKTKKHKCLVKQIILIKERMAPMITG-NLENTQTTI--	678
Qy	131	LVAPAVPSCVEPSSALSGTGVVELRCQDKGNPAPEYTWFKDGIIRLENPRLGSSQSTNSSY	190
Db	679	-----GETIEVTC-PASGNPTPHITWFKDNETLVDSGIIVLDGRNVL	720
Qy	191	TNNTKTGTLQFNVTSKLDTGEYSCARNISVGYYR	224
Db	721	TI-----RRVRKEDGGLYTCQACNVLGCAR	745

F;422-444/Domain: hydrophobic #status predicted <HYD>
F;163,294,467/Binding site: carbohydrate (Asn) #status predicted
Query Match 10.3%; Score 157; DB 2; Length 860;
Best Local Similarity 27.7%; Pred. No. 0.00012;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;
QY 66 LGRSVSFVYQOQLQGD--FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEE 123
DB 204 LERNQRIIFLEPTEQPLVFKTAPVDPN--GKNI-KKEVGKILCTDCATRPKLKMKKS 260
QY 124 DTVTLVLVAVPSCVPSALSGTVLRCODKEGNPAPEYTFWFGDGRILLENPLRGS 183
DB 261 QTGEV-----GEKQSLKCEAAAGNPPQPSYRWFPGDKGLNR-----S 296
QY 184 QSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNI-----S 238
DB 297 RDIRIKYNGRKNRSLQFNKVKVEDAGEYVCEAENILGKDTVRG-RLHVNVSVTLLSSWS 355
QY 239 GIIAAVVVVALVISVCGLGVCY 260
DB 356 GHARKCNETAKSYCVNG-GVCY 376
RESULT 10
JC5701
Erbb kinase activator alpha1, brain and thymus - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 08-Sep-2002
C;Accession: JC5701; PC4411
R;Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miyag
J. Biochem. 122, 675-680, 1997
A;Title: A novel brain-derived member of the epidermal growth factor family that interact
A;Reference number: JC5700; MUID:98006324; PMID:9348101
A;Accession: JC5701
A;Molecule type: mRNA
A;Residues: 1-868 <HIG>
A;Cross-references: DDBU:D89995; NID:g2605629; PIDN:BAA23344.1; PID:g2605630
A;Accession: PC4411
A;Molecule type: protein
A;Residues: 128-162 <HT2>
A;Experimental source: PC-12 cell
C;Comment: This protein is a member of the epidermal growth factor family. It is function
ating the differentiation of MD4-MB-453 cells.
C;Superfamily: human Erbb kinase activator alpha, brain and thymus; EGF homology; immun
F;361-397/Domain: EGF homology <EGF>
Query Match 10.3%; Score 157; DB 2; Length 860;
Best Local Similarity 27.7%; Pred. No. 0.00013;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;
QY 66 LGRSVSFVYQOQLQGD--FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEE 123
DB 204 LERNQRIIFLEPTEQPLVFKTAPVDPN--GKNI-KKEVGKILCTDCATRPKLKMKKS 260
QY 124 DTVTLVLVAVPSCVPSALSGTVLRCODKEGNPAPEYTFWFGDGRILLENPLRGS 183
DB 261 QTGEV-----GEKQSLKCEAAAGNPPQPSYRWFPGDKGLNR-----S 296
QY 184 QSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNI-----S 238
DB 297 RDIRIKYNGRKNRSLQFNKVKVEDAGEYVCEAENILGKDTVRG-RLHVNVSVTLLSSWS 355
QY 239 GIIAAVVVVALVISVCGLGVCY 260
DB 356 GHARKCNETAKSYCVNG-GVCY 376
RESULT 11
TDHULK
leukocyte antigen-related protein precursor - human
N;Alternate names: leukocyte common antigen homology
N;Contains: protein-tyrosine-phosphatase (BC 3.1.3.48)

C;Species: Homo sapiens (man)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 22-Jun-1999
C;Accession: S03841; JLO051
J;Streuli, M.; Krueger, N.X.; Hall, L.R.; Schlossman, S.F.; Saito, H.
J. Exp. Med. 168, 1523-1530, 1988
A;Title: A new member of the immunoglobulin superfamily that has a cytoplasmic region h
A;Reference number: JLO051; MUID:89035978; PMID:2972792
A;Accession: S03841
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-1897 <STR>
A;Cross-references: EMBL:Y00815; NID:g34266; PIDN:CAA68754.1; PID:g34267
C;Genetics:
A;Gene: GDB:PTPRP; LAR
A;Cross-references: GDB:120138; OMIM:179590
A;Map position: lp34-lp34
C;Superfamily: leukocyte antigen-related protein; fibronectin type III repeat homology;
C;Keywords: glycoprotein; phosphoprotein; phosphoric monoester hydrolase; transmembrane
F;1-16/Domain: signal sequence #status predicted <SIG>
F;17-1897/Product: leukocyte antigen-related protein #status predicted <MAT>
F;17-1250/Domain: extracellular #status predicted <EXT>
F;37-99/Domain: immunoglobulin homology <IMM1>
F;139-199/Domain: immunoglobulin homology <IMM2>
F;236-290/Domain: immunoglobulin homology <IMM3>
F;308-390/Domain: fibronectin type III repeat homology <FN3A>
F;403-489/Domain: fibronectin type III repeat homology <FN3B>
F;501-583/Domain: fibronectin type III repeat homology <FN3C>
F;596-685/Domain: fibronectin type III repeat homology <FN3D>
F;698-798/Domain: fibronectin type III repeat homology #status atypical <FN3E>
F;810-893/Domain: fibronectin type III repeat homology <FN3F>
F;905-989/Domain: fibronectin type III repeat homology <FN3G>
F;1001-1078/Domain: fibronectin type III repeat homology <FN3H>
F;1251-1274/Domain: transmembrane #status predicted <TM>
F;1275-1897/Domain: intracellular #status predicted <INT>
F;1285-1897/Domain: leukocyte common antigen cytosolic domain homology <LAC>
F;1365-1586/Domain: protein-tyrosine-phosphatase homology <PTP1>
F;1654-1877/Domain: protein-tyrosine-phosphatase homology <PTP2>
F;44-97,146-197,243-288/Disulfide bonds: #status predicted
F;107,240,285,711,956/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;1538/Active site: Cys (phosphotyrosine intermediate) #status predicted
F;1544/Binding site: substrate phosphate (Arg) #status predicted
F;1829/Active site: Cys (phosphotyrosine intermediate) #status predicted
F;1835/Binding site: substrate phosphate (Arg) #status predicted
Query Match 10.3%; Score 156; DB 1; Length 1897;
Best Local Similarity 25.8%; Pred. No. 0.00039;
Matches 59; Conservative 35; Mismatches 89; Indels 46; Gaps 10;
QY 11 LLLRLVLVALGVHKAYGFSAPKQQVTVAVYQEQAILLACKT---PKTVKSLRWKKLG 67
DB 8 LVMGLVAGAGDSKPVFIKVPEDQ---TGLSGGVASFVCQATGEPK---PRITWKKG 60
QY 68 RSVSFVYQOQLQGD--FKNRAEMIDFN-----IRIKNV-TRSDAGKYRCEVSAPSEQQN 120
DB 61 KKVSV-----SQRFVIEFDGAGSVLRQIPLRVQDEAIYECTATNSLGEINT 108
QY 121 LBEEDTVTLVLVAVPSCV-----VPSSALSGTVLRCODKEGNPAPEYTFWFGDGR 174
DB 109 SAKLSVLEBEQLPPGPPSIDMGFPQLKVKVEKATATML---CA-AGGNPDPEISMFKDFLP 164
QY 175 LLENPLRGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCAARNVGYR 223
DB 165 V-----DPATSNGRIRIKLRSGALQIESSESDQKYECVATNSAGTR 206
RESULT 12
T23007
hypothetical protein K09C8.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Feb-2000
C;Accession: T23007; T23543
R;Kershaw, J.

DB 2715 -----LLINSVDKKHGFCEYLCTIRNQGEELANAMILSEGBEC-RKHPRIDIVFVCNSFI 2767
 QY 243 AVVVVALVISV 253
 DB 2768 FSVVHVLLISI 2778

RESULT 14
 JE0100
 neutral cell adhesion molecule 2 - African clawed frog
 N;Alternate names: N-CAM 2
 C;Species: Xenopus laevis (African clawed frog)
 C;Date: 19-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jul-2000
 C;Accession: JE0100
 R;Kudo, M.; Takayama, E.; Tadakuma, T.; Shiokawa, K.
 Biochem. Biophys. Res. Commun. 245, 127-132, 1998
 A;Title: Molecular cloning of esd-form neural cell adhesion molecules (N-CAMs) as the m
 A;Reference number: JE0099; MUID:98204770; PMID:9535795
 A;Accession: JE0100
 A;Molecule type: mRNA
 A;Residues: 1-725 <KUD>
 A;Cross-references: DDBJ:AB008163; NID:g3116228; PIDN:BAA25932.1; PID:g3116229
 A;Experimental source: heart
 C;Comment: This protein mediates and regulates various cell-cell interactions through b
 C;Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; imm
 F;413-475/Domain: immunoglobulin homology <IMW>
 F;512-599/Domain: fibronectin type III repeat homology <3FR>

Query Match 10.2%; Score 155; DB 2; Length 725;
 Best Local Similarity 26.6%; Pred. No. 0.00015;
 Matches 55; Conservative 37; Mismatches 99; Indels 16; Gaps 8;

QY 29 FSAPKDQOV--VTAVXVQEAIIACKTPKTVKXSRLEWKLGSRVSFVYYQOTLOGDFKNR 86
 DB 300 YAPKITYENKTAVELDEITLCEASGDPIPS-ITWRTAHRNIS--SEKTLGDHIVVK 356
 QY 87 AEMIDFNIRIKNVTNRDAGKYRCEVSAPSEGGQNLLEDVTVLEVLVAPAVPSCVEPPSSAL 146
 DB 357 DHIRMSALTLDIQYTDAGEYFCVASNP1---GVDQMAMVFEVQYAPKIRG-PVVVYTW 411
 QY 147 SGTVVELRCDKGNPAPEYTWFKDGIIRLLENPRLGSSQTSNYSYTMKTGTLOFNVTSK 206
 DB 412 EGNPNVITC-DVLAHPSAAVSWFRDG-QLLPS----SNFSNIKIYNGPTFSSELVNPDS 465
 QY 207 LDTGEYSCEARNVGYRCFCGRMVD 233
 DB 466 NDFGNVNCYSAVNSIGHSESEFFILVQAD 492

RESULT 15
 JC5700
 ErbB kinase activator alpha, brain and thymus - human
 C;Species: Homo sapiens (man)
 C;Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 08-Sep-2002
 C;Accession: JC5700
 R;Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miya
 J. Biochem. 122, 675-680, 1997
 A;Title: A novel brain-derived member of the epidermal growth factor family that intera
 A;Reference number: JC5700; MUID:98006324; PMID:9348101
 A;Accession: JC5700
 A;Status: nucleic acid sequence not shown
 A;Molecule type: mRNA
 A;Residues: 1-850 <HIG>
 A;Cross-references: DDBJ:AB005060; NID:g2626738; PIDN:BAA23417.1; PID:g2626739
 A;Experimental source: SK-NSH cell
 C;Comment: This protein is a member of the epidermal growth factor family. It is functi
 ating the differentiation of MDA-MB-453 cells.
 C;Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immu
 C;Keywords: glycoprotein
 F;258-311/Domain: Ig-like #status predicted <IGL>
 F;345-381/Domain: EGF homology <EGF>
 F;346-381/Domain: EGF-like #status predicted <EGF2>

Search completed: December 9, 2003, 17:13:41
Job time : 17.0557 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:08:11 ; Search time 9.86411 Seconds
(without alignments)
1420.702 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRRLRLRLRLRLVLA.....SSKATTMSSEDFKHTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 127863

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1518	99.8	298	1	JAM2_HUMAN
2	429	28.2	299	1	JAM1_MOUSE
3	421	27.7	300	1	JAM1_MOUSE
4	415.5	27.3	298	1	JAM1_BOVIN
5	231	15.2	319	1	A33_HUMAN
6	195.5	12.9	365	1	CXAR_HUMAN
7	186	12.2	873	1	FAS2_DROME
8	180	11.8	365	1	CXAR_MOUSE
9	171	11.2	632	1	UN89_CABEL
10	164	10.8	344	1	CEA6_HUMAN
11	160.5	10.6	1367	1	VGR2_MOUSE
12	159.5	10.5	837	1	NCM2_MOUSE
13	157	10.3	868	1	NRG2_RAT
14	156	10.3	756	1	NRG2_MOUSE
15	156	10.3	1897	1	PTPF_HUMAN
16	155.5	10.2	837	1	NCM2_HUMAN
17	155	10.2	850	1	NRG2_HUMAN
18	153.5	10.1	521	1	CEA1_MOUSE
19	153.5	10.1	1343	1	VGR2_RAT
20	151	9.9	1092	1	NCM2_XENLA
21	148.5	9.8	519	1	ECTO_RAT
22	148	9.7	1088	1	NCM1_XENLA
23	147.5	9.7	1091	1	NCM1_CHICK
24	147.5	9.7	1912	1	PTPD_HUMAN
25	147	9.7	526	1	NCM2_HUMAN
26	146.5	9.6	761	1	CEA2_HUMAN
27	146.5	9.6	848	1	NCM1_HUMAN
28	146	9.6	1051	1	PTK7_CHICK
29	145	9.5	333	1	AMAL_DROME
30	145	9.5	764	1	ICCR_DROME
31	145	9.5	1302	1	NRG2_DROME
32	144.5	9.5	349	1	CEA8_HUMAN
33	143	9.4	858	1	NCM1_RAT
					P57087 homo sapien
					Q9Y624 homo sapien
					O88792 mus musculus
					Q9xt56 bos taurus
					Q99795 homo sapien
					P78310 homo sapien
					P34082 drosophila
					P97792 mus musculus
					O01761 caenorhabdi
					P40199 homo sapien
					P35918 mus musculus
					O35136 mus musculus
					O35569 rattus norv
					P56974 mus musculus
					P10586 homo sapien
					O15394 homo sapien
					O14511 homo sapien
					P31809 mus musculus
					O08775 rattus norv
					P36335 xenopus lae
					P16573 rattus norv
					P1670 xenopus lae
					P33590 gallus gall
					P23468 homo sapien
					P13688 homo sapien
					P13592 homo sapien
					Q91048 gallus gall
					P15364 drosophila
					Q08180 drosophila
					P20241 drosophila
					P31997 homo sapien
					P13596 rattus norv

ALIGNMENTS

RESULT 1

ID	JAM2_HUMAN	STANDARD;	PRT;	298 AA.
AC	P57087			
DT	16-OCT-2001 (Rel. 40, Created)			
DT	16-OCT-2001 (Rel. 40, Last sequence update)			
DT	15-SEP-2003 (Rel. 42, Last annotation update)			
DE	Functional adhesion molecule 2 precursor (Vascular endothelial			
DE	junction-associated molecule) (VE-JAM).			
GN	JAM2 OR VEJAM OR C21ORP43.			
OS	Homo sapiens (Human).			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.			
OX	NCBI_TaxID=9606;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Vascular endothelial cells;			
RX	MEDLINE=20317114; PubMed=10779521;			
RA	Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;			
RT	"Vascular endothelial junction-associated molecule, a novel member of			
RT	the immunoglobulin superfamily, is localized to intercellular			
RT	boundaries of endothelial cells.";			
RL	J. Biol. Chem. 275:19139-19145(2000).			
RN	[2]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Placenta;			
RX	MEDLINE=20507930; PubMed=10945976;			
RA	Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjerkke R.J.,			
RA	Vanderslice P., Morris A.P., Brock T.A.;			
RT	"A novel protein with homology to the junctional adhesion molecule:			
RT	Characterization of leukocyte interactions.";			
RL	J. Biol. Chem. 275:34750-34756(2000).			
RN	[3]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Lung;			
RX	MEDLINE=22388257; PubMed=12477932;			
RA	Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,			
RA	Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,			
RA	Altshul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,			
RA	Hopkins R.F., Jordan K., Moore T., Max S.I., Wang J., Hsieh F.,			
RA	Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,			
RA	Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,			
RA	Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,			
RA	Raha S.S., Loguercio N.A., Peters G.J., Abramson R.D., Mullahy S.J.,			
RA	Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,			
RA	Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,			
RA	Villalón D.K., Murny D.M., Sodergren E.J., Lu X., Gibbs R.A.,			
RA	Fahy J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,			
RA	Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,			
RA	Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,			
RA	Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,			
RA	Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallos D.E.,			
RA	Schmerch A., Schein J.E., Jones S.J.M., Marra M.A.;			
RT	"Generation and initial analysis of more than 15,000 full-length			
RT	human and mouse cDNA sequences.";			
RL	Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).			

34	142.5	9.4	265	1	CEA7_HUMAN
35	140.5	9.2	344	1	NTR1_RAT
36	140.5	9.2	847	1	CD22_HUMAN
37	140	9.2	359	1	LACH_DROME
38	140	9.2	853	1	NCM1_BOVIN
39	140	9.2	1906	1	KML5_CHICK
40	140	9.2	4391	1	PGBM_HUMAN
41	139	9.1	725	1	NCA2_MOUSE
42	139	9.1	1115	1	NCA1_MOUSE
43	139	9.1	3707	1	PGBM_MOUSE ...
44	138.5	9.1	702	1	CEA5_HUMAN
45	138.5	9.1	1709	1	SN_HUMAN

Q14002	homo sapien
O62718	rattus norv
P20273	homo sapien
Q24372	drosophila
P31836	bos taurus
P11799	gallus gall
P98160	homo sapien
P13594	mus musculus
P13595	mus musculus
Q05793	mus musculus
Q06731	homo sapien
Q9BZZ2	homo sapien


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DR EMBL; AF207907; AAF22829.1; -.
DR EMBL; AF172398; AAD48877.1; -.
DR EMBL; AL136649; CAB66584.1; -.
DR PIR; A59406; S56749.
DR Genew; HGNC:14685; F1LR.
DR MIM; 605721; -.
DR GO; GO:0006954; P:inflammatory response; TAS.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_V.
DR Pfam; PF00047; ig; 2.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG-LIKE; 2.
KW Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
KW Repeat; Signal.
FT SIGNAL 1 25
FT CHAIN 26 299
FT DOMAIN 26 238
FT TRANSMEM 239 259
FT DOMAIN 260 299
FT DOMAIN 27 125
FT DOMAIN 135 228
FT DISULFID 150 109
FT DISULFID 153 212
FT CARBOHYD 185 185
SQ SEQUENCE 299 AA; 32583 MW; D95DE2FEA23D2851 CRC64;

Query Match 28.28; Score 429; DB 1; Length 299;
Best Local Similarity 34.28; Pred. No. 5.4e-29;
Matches 106; Conservative 50; Mismatches 126; Indels 28; Gaps 8;

QY 2 ARSRHRLLLRLVLAVALVGHKAYGFA-----PKDQVTVAVYQEAAILACKTPKK 55
DQ : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 5 AQVERKLLCLFILAILLCSALGSLVTVHSSEPEVRIPENPNPKLSCLAYS-----GFSSP-- 58
QY 56 TVXSRLWK-KLGRSVFVYQOTLQDFKRAEMIDFNIRIKNVTRSDAGKYRCEVSAP 114
DQ : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 59 -----RVWEKFDQDGTTLRLVCYNNKNTASYEDYDFLPTGITFKSVTRDGTGTVCMVS-- 112
QY 115 SEQQNLDEDTVLVLAVALVAPVPSCEVPSSALSGTVVLRCQDEKGNPAPEYTFWKDGIR 174
DQ : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 113 EEGNSYGEVKVLLVLPSPKTVNIPSSATIGNRAVLTCSDQSGSPPEYTFWKDGIV 172
QY 175 LIENPLRGSQSTSNVMTNKTGTLQFNTVSKLDTGEYSCEARNSVGYRRCPGK-RMQVD 233
DQ : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 173 MPTNPKSTRAFSSVYLPNTTCELVDPLSDTGEYSCEARNGYGTPTMSNAVRMEAV 232
QY 234 DLNISGIIIAVVVALVISVGLVGVCAQKGYFSKTSFKQNSSSKA-----TTMSEN 288
DQ : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 233 ERNVGVIVAVALVTLILLGILVFGIWFAYSRGHFDR-----KKGTSKKVIYQPSARSEG 289
QY 289 DFQHTKSFII 298
DQ : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 290 EFKQTSFLV 299

RESULT 3
ID JAM1 MOUSE
AC O88782;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update).
DE 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 1 precursor (JAM).
GN F1LR OR JAM1 OR JCAM1 OR JCAM.
OS Mus musculus (Mouse)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI Taxid=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=98327120; PubMed=9660867;
RA Martin-Padura I., Lostaglio S., Schneemann M., Williams L., Romano M.,

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RA Fruscella P., Panzeri C., Stoppacciaro A., Ruco L., Villa A.,
RA Simons D., Dejana E.;
RT "Junctional adhesion molecule, a novel member of the immunoglobulin
RT superfamily that distributes at intercellular junctions and modulates
RT monocyte transmigration.";
RL J. Cell Biol. 142:117-127(1998).
RN [2]
RP INTERACTION WITH PAR3.
RX PubMed=11447115;
RA Ebnet K., Suzuki A., Horikoshi Y., Hirose T.,
RA Meyer zu Bruckwedde M.-K., Ohno S., Vestweber D.;
RT "The cell polarity protein ASIP/PA3 directly associates with
RT junctional adhesion molecule (JAM).";
RL EMBO J. 20:3738-3748(2001).
RN [3]
RP X-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS) OF 212-238.
RX PubMed=11500366;
RA Kostrewa D., Brockhaus M., D'Arcy A., Dale G.E., Nelboeck P.,
RA Schmid G., Mueller F., Bazzoni G., Dejana E., Bartfai T.,
RA Winkler F.K., Hennig M.;
RT "X-ray structure of junctional adhesion molecule: structural basis for
RT homophilic adhesion via a novel dimerization motif.";
RL EMBO J. 20:4391-4398(2001).
RN CC -1- FUNCTION: Seems to play a role in epithelial tight junction
CC formation. Appears early in primordial forms of cell junctions and
CC recruits PAR3. The association of the PAR3-PAR6 complex may
CC prevent the interaction of PAR3 with JAM1, thereby preventing
CC tight junction assembly. Plays a role in regulating monocyte
CC transmigration involved in integrity of epithelial barrier.
CC Involved in platelet activation.
CC -1- SUBUNIT: Interacts with the first PDZ domain of PAR3. The
CC association between PAR3 and PAR6B probably disrupts this
CC interaction.
CC -1- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC Localized at tight junctions of both epithelial and endothelial
CC cells.
CC -1- TISSUE SPECIFICITY: Localized at tight junctions of both
CC epithelial and endothelial cells.
CC -1- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -1- SIMILARITY: Contains 2 immunoglobulin-like V-type domains.
CC
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CC -----
CC EMBL; U89915; AAC32982.1; -.
CC PDB; 1F97; 22-AUG-01.
CC MGD; MGI:1321398; F1LR.
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR003006; Ig_MHC.
CC InterPro; IPR003596; Ig_V.
CC Pfam; PF00047; ig; 2.
CC SMART; SM00406; IGV; 1.
CC PROSITE; PS00835; IG-LIKE; 2.
KW Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
KW Repeat; Signal; 3D-structure.
FT SIGNAL 1 26
FT CHAIN 27 300
FT DOMAIN 27 238
FT TRANSMEM 239 259
FT DOMAIN 260 299
FT DOMAIN 28 122
FT DOMAIN 134 230
FT DISULFID 49 108
FT DISULFID 152 212
FT CARBOHYD 42 42
FT CARBOHYD 185 185
SQ SEQUENCE 300 AA; 32368 MW; 391F3E48FF3B97EC CRC64;

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Query Match      27.7%; Score 421; DB 1; Length 300;
Best Local Similarity 34.6%; Pred. No. 2.6e-28;
Matches 104; Conservative 55; Mismatches 130; Indels 12; Gaps 6;

QY 4 RSRHRLLLRLYLVALGYHAYGFSAPKQDQVVVAVXQEQAILACKTPKKTVXSRLW 63
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 6 KAGRKLFLFTSMILGSLVOGSGSVYTAQSDVQVPE---NESIKLTCTYSGFSSPRVEM 61

QY 64 KKL-GRSVFVYQOTLQDGFKNRAEMIDFNIRKNTSRDAGKYRCEVSPSQGNLE 122
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 62 KFOGSGTALVCYNSQITAPYADRVTFFSSSGITFSSVTRKDNGBYTCMWS--EEGQNYG 119

QY 123 EDTVTLVLVAPVSPCEVPSSALSGTVLRCODKEGNPAPEYTFWFKDGIIRLLENPLG 182
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 120 EVSHILVLVPPSKPTISVSSVTIGNRAVLTCSEHDGSPSEYFNFKDGLISMLTADAKK 179

QY 183 SOS--TNSSYTNTKGTQLQNTVSKLDGTGEYSCARNVSVG--YRCPGKRMQVDDLNTSGI 240
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 180 TRAPNSSFITDPKSGDLIFDPVTAFDGSEYVCAQNGYGTAMRSEAAMDVAELNVGGI 239

QY 241 IAAVVVVALVSVGLGVCAQRKGYF---SKETSFOKSSSSKATMTSENDFKHTKXFI 297
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 240 VAAVLVTLILGLIFGWFAYSRGYFETTKKGTAQKVIYSQPSRSGEFKQTSFSL 299

QY 298 I 298
   :
Db 300 V 300

RESULT 4
JAMI_BOVIN STANDARD; PRT; 298 AA.
ID JAMI_BOVIN STANDARD; PRT; 298 AA.
AC Q9XT56;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 1 precursor (JAMI).
GN FliR OR JAMI.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99323940; PubMed=10395639;
RA Ozaki H., Ishii K., Horiuchi H., Arai H., Kawamoto T., Okawa K.,
RA Iwamatsu A., Kita T.;
RT "Combined treatment of TNF-alpha and IFN-gamma causes redistribution
RL J. Immunol. 163:553-557(1999).
CC -!- FUNCTION: Seems to play a role in epithelial tight junction
CC formation. Appears early in primordial forms of cell junctions and
CC recruits PAR3. The association of the PAR6-PARD3 complex may
CC prevent the interaction of PAR3 with JAMI, thereby preventing
CC tight junction assembly (By similarity). Plays a role in
CC regulating monocyte transmigration involved in integrity of
CC epithelial barrier. Involved in platelet activation.
CC -!- SUBUNIT: Interacts with the first PDZ domain of PAR3. The
CC association between PAR3 and PAR6B probably disrupts this
CC interaction (By similarity).
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC -!- TISSUE SPECIFICITY: Localized at tight junctions of both
CC epithelial and endothelial cells.
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -!- SIMILARITY: Contains 2 immunoglobulin-like V-type domains.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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-----
CC EMBL; AF111714; AAD42051.1; -
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR003598; Ig c2.
CC Pfam; PF00047; Ig; 2.
CC SMART; SM00408; IGC2; 1.
CC PROSITE; PSS0835; IG-LIKE; 2.
KW Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
KW Repeat; Signal.
FT SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 298 JUNCTIONAL ADHESION MOLECULE 1.
FT DOMAIN 25 237 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 238 258 POTENTIAL.
FT DOMAIN 259 298 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 28 124 IG-LIKE V-TYPE 1.
FT DOMAIN 134 227 IG-LIKE V-TYPE 2.
FT DISULFID 49 108 POTENTIAL.
FT DISULFID 152 211 POTENTIAL.
FT CARBOHYD 184 184 N-LINKED (GLCNAC...) (POTENTIAL).
SQ SEQUENCE 298 AA; 32456 MW; 714FE1C1714769A2 CRC64;

Query Match      27.3%; Score 415.5; DB 1; Length 298;
Best Local Similarity 35.1%; Pred. No. 7.4e-28;
Matches 107; Conservative 47; Mismatches 118; Indels 33; Gaps 10;

QY 9 LLL---LLRLYLVALGYHAYGFSAPKQDQVVVAVXQEQAILAC-----KTPKKTVXSR 60
   ||| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 12 LLLFTSMILGSLALGRGAVQTY-----EPVVVPENNPALKLSCSYSGFSSP-----R 58

QY 61 LEWK-KLGRSVFVYQOTLQDGFKNRAEMIDFNIRKNTSRDAGKYRCEVSPSQGQ 119
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 59 VENKFTGDIRGLVCYNNKITASYENRVTFSDTGITFHSVTRKDTGMYTCMWS--DEGNG 116

QY 120 NLEEDTVTLVLVAPVSPCEVPSSALSGTVLRCODKEGNPAPEYTFWFKDGIIRLLENP 179
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 117 TYGEVTVQLVLVPPSKPTINVSSTIGTRAVLTCSRDSGSPSEYKFNKDGEMPLEP 176

QY 180 RLGSQSTNSSYTNTKGTQLQNTVSKLDGTGEYSCARNVSVGYRRCFGK----RMQVDDL 235
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 177 KSNRAFSSNSYTLNKTGELIFDPVSASDTGDTFCQAQN--GY-ASPVKSDTVHMDAVEL 233

QY 236 NISGIIAAVVALVSVGLGVCAQRKGYF---SKETSFOKSSSSKATMTSENDFKHT 293
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 234 NVGGIIVAAVFTLILGLIFGWFAYSRGYFDRACKGTSNKKVIYSQPNARSDGEFROT 293

QY 294 KSFII 298
   ||| : :
Db 294 SSFLV 298

RESULT 5
A33_HUMAN STANDARD; PRT; 319 AA.
ID A33_HUMAN STANDARD; PRT; 319 AA.
AC Q9795;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Cell surface A33 antigen precursor (Glycoprotein A33).
GN GPA33.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A. AND PARTIAL SEQUENCE.
RC TISSUE=Colon carcinoma;
RX MEDLINE=97165045; PubMed=9012807;
RA Heath J.K., White S.J., Johnstone C.N., Catimel B., Simpson R.J.,
RA Moritz R.L., Tu G.-F., Ji H., Whitehead R.H., Groenen L.C.,
RA Scott A.M., Ritter G., Cohen L., Welt S., Old L.J., Nice E.C.,
RA Burgess A.W.;

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RT "The human A33 antigen is a transmembrane glycoprotein and a novel
 RL member of the immunoglobulin superfamily.";
 RN Proc. Natl. Acad. Sci. U.S.A. 94:469-474(1997).
 RP POST-TRANSLATIONAL MODIFICATIONS.
 RX MEDLINE=97396159; PubMed=9245713;
 RA Ritter G., Cohen L.S., Nice E.C., Catimel B., Burgess A.W.,
 RA Moritz R.L., Ji H., Heath J.K., White S.J., Welt S., Old L.J.,
 RA Simpson R.J.;
 RT "Characterization of posttranslational modifications of human A33
 RT antigen, a novel palmitoylated surface glycoprotein of human
 RT gastrointestinal epithelium.";
 RL Biochem. Biophys. Res. Commun. 236:682-686(1997).
 CC !- FUNCTION: MAY PLAY A ROLE IN CELL-CELL RECOGNITION AND SIGNALING.
 CC !- SUBCELLULAR LOCATION: Type I membrane protein.
 CC !- TISSUE SPECIFICITY: EXPRESSED IN NORMAL GASTROINTESTINAL
 CC EPITHELIUM AND IN 95% OF COLON CANCERS.
 CC !- PTM: N-GLYCOSYLATED, CONTAINS APPROXIMATELY 8 KDA OF N-LINKED
 CC CARBOHYDRATE.
 CC !- PTM: PALMITOYLATED.
 CC !- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
 CC !- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
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 CC -----
 DR EMBL; U79725; AAC50957.1; -;
 DR Genbank; HGNC:4445; GBA33.
 DR MIM; 602171; -;
 DR GO; GO:0005888; C:proteoglycan integral to plasma membrane; TAS.
 DR GO; GO:0004872; F:receptor activity; TAS.
 DR InterPro; IPR007110; Ig-Like.
 DR InterPro; IPR003006; Ig_MHC.
 DR Pfam; PF00047; Ig_2.
 DR SMART; SM00406; IGV; 1.
 DR PROSITE; PS50835; IG_LIKE; 2.
 DR Immunoglobulin domain; Lipoprotein; Palmitate; Glycoprotein;
 KW Transmembrane; Signal; Antigen.
 FT SIGNAL 1 21
 FT CHAIN 22 319
 FT DOMAIN 22 235
 FT TRANSMEM 236 256
 FT DOMAIN 257 319
 FT DOMAIN 22 134
 FT DOMAIN 140 227
 FT DOMAIN 258 261
 FT DISULFID 43 117
 FT DISULFID 146 222
 FT DISULFID 162 211
 FT CARBOHYD 112 112
 FT CARBOHYD 200 200
 FT CARBOHYD 223 223
 SQ SEQUENCE 319 AA; 35632 MW; 9BFC7AAF45C2408E CRC64;
 Query Match 15.2%; Score 231; DB 1; Length 319;
 Best Local Similarity 28.6%; Pred. No. 2.9e-12;
 Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
 QY 30 SAPKDDQVAVXQAEAILACKTKPKTVXSR---LEWKKL-----GRSVFVYQQT-LQ 80
 DB 23 SVETPDVLRASQKSVTLPC-TYHTSTSSREGLIQMDKLLLTHTERVVIMPFNSKNYIH 81
 QY 81 GD-FKNR-----AEMIDFNIRIKNVRTSDAGKYRCEVSAPSEQQNLDEDT---VTLEV 130
 DB 82 GELYKNRVSISNNAEQSDASITIDQLTMADNGTYECSVLSMSD-----LEGNTKSRVLLV 137
 QY 131 LVAPAVSCEVPSSALSGTVVELRCQKGNPAPEYTFWKDGIRLLNPRIGSQSTSSSY 190

Db 138 LVPPSKPEGIGETIIGNNIQLTQSKEGSTPQYSWKRYNLNQEQPLAQPASQPV 197
 QY 191 TWNTKTGLQFNTVSKLTGGEYSCARNISGVRRCP-GKRMQVDDLNIS-----GI 242
 Db 198 LKNISTDT-----SGYYICTSSNEEGTQFCNITVAVRSPSNMVALYVGVIAVGVA 247
 QY 243 AVVVVALVISVC 254
 Db 248 ALIIIGIYYCC 259
 RESULT 6
 CXAR_HUMAN STANDARD; PRT; 365 AA.
 AC P78310; O00694;
 DT 30-MAY-2000 (Rel. 39, Created)
 DT 30-MAY-2000 (Rel. 39, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Coxsackievirus and adenovirus receptor precursor (Coxsackievirus B-
 DE adenovirus receptor) (hCAR) (CVB3 binding protein).
 GN CXADR OR CAR.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97190109; PubMed=9036860;
 RA Bergelson J.M., Cunningham J.A., Droguett G., Kurt-Jones E.,
 RA Krithivas A., Hong J.S., Horwitz M.S., Crowell R.L., Finberg R.W.;
 RT "Isolation of a common receptor for Coxsackie B viruses and
 RT adenoviruses 2 and 5.";
 RL Science 275:1320-1323(1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97250541; PubMed=9096397;
 RA Tomko R.P., Xu R., Philipson L.;
 RT "hCAR and hCAR: the human and mouse cellular receptors for subgroup C
 RT adenoviruses and group B coxsackieviruses.";
 RL Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20008750; PubMed=10543405;
 RA Bowles K.R., Gibson J., Wu J., Shaffer L.G., Towbin J.A.,
 RA Bowles N.B.;
 RT "Genomic organization and chromosomal localization of the human
 RT Coxsackievirus B-adenovirus receptor gene.";
 RL Hum. Genet. 105:354-359(1999).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX Anderson C.W., Kieleczawa J., Dunn J.J., Freimuth P.;
 RT "Sequence and expression of CXADR, the human gene for the
 RT coxsackievirus and adenovirus receptor.";
 RL Submitted (OCT-1999) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RX Anderson B., Tomko R., Andersson K., Darban H., Oncu D., Mizra M.,
 RX Sollerbrant K., Sonhammer E., Philipson L.;
 RT "Putative regulatory domains in the human and mouse CAR genes.";
 RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
 RN [6]
 RP SEQUENCE FROM N.A.
 RX TISSUE=Cervix;
 RX MEDLINE=22388257; PubMed=12477932;
 RA Strauberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Hopkins R.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Diatchenko L., Marusina K., Moore T., Max S.I., Wang J., Heish F.,
 RA Skaplen M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udell T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,

RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Vittalion D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketterman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalek U., Smailus D.E.,
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.,
RT "Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
CC -!- FUNCTION: SERVES AS A RECEPTOR FOR GROUP B COXSACKIEVIRUSES AND
CC SUBGROUP C OF ADENOVIRUSES (AD2 AND AD5).
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; Y07593; CAA68668.1; -
CC EMBL; U90716; AAC51234.1; -
CC EMBL; AF169366; AAF05908.1; -
CC EMBL; AF169360; AAF05908.1; JOINED.
CC EMBL; AF169361; AAF05908.1; JOINED.
CC EMBL; AF169362; AAF05908.1; JOINED.
CC EMBL; AF169363; AAF05908.1; JOINED.
CC EMBL; AF169364; AAF05908.1; JOINED.
CC EMBL; AF169365; AAF05908.1; JOINED.
CC EMBL; AF200465; AAF24344.1; -
CC EMBL; AF242865; AAG01088.1; -
CC EMBL; AF242862; AAG01088.1; JOINED.
CC EMBL; AF242864; AAG01088.1; JOINED.
CC EMBL; BC003684; AAH03684.1; -
CC EMBL; BC010536; AAH10536.1; -
CC PDB; 1E4J; 13-JUL-01.
CC PDB; 1F5W; 08-NOV-00.
CC PDB; 1KAC; 24-NOV-99.
CC Genew; HGNC:2559; CXADR.
CC MIM; 602621; -
CC GO; GO:0005887; C:integral to plasma membrane; TAS.
CC GO; GO:0004872; F:receptor activity; TAS.
CC InterPro; IPR007110; IG-like.
CC InterPro; IPR003598; IG_C2.
CC InterPro; IPR003006; IG_MHC.
CC Pfam; PF00047; Ig; 2.
CC SMART; SM00408; IGC2; 1.
CC PROSITE; PS00835; IG_LIKE; 2.
CC Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
CC Repeat; 3D-structure.
CC SIGNAL 1 19
CC CHAIN 20 365
CC DOMAIN 20 237
CC COXSACKIEVIRUS AND ADENOVIRUS RECEPTOR.
CC EXTRACELLULAR (POTENTIAL).
CC POTENTIAL.
CC TRANSMEM 238 258
CC DOMAIN 259 365
CC CYTOPLASMIC (POTENTIAL).
CC DOMAIN 20 134
CC IG-LIKE C2-TYPE 1.
CC IG-LIKE C2-TYPE 2.
CC DOMAIN 141 228
CC BY SIMILARITY.
CC FT DISULFID 41 120
CC FT DISULFID 162 212
CC FT DISULFID 106 106
CC FT CARBOHYD 201 201
CC N-LINKED (GLCNAC. .) (POTENTIAL).
CC N-LINKED (GLCNAC. .) (POTENTIAL).
CC SEQUENCE 365 AA; 40029 MW; AB01C6346CB7FE64 CRC64;
Query Match 12.9%; Score 195.5; DB 1; Length 365;
Best Local Similarity 23.3%; Pred. No. 3.4e-09;
Matches 67; Conservative 57; Mismatches 123; Indels 41; Gaps 9;
QY 10 LLLLLRVLLVGVHKGAFSAPKDDQVTVAVXYQAEILACK---TPKTKVSRLEW--- 63

Db 3 LLLCFVLLGVVDVFAISLSITTP--EEMIEKAKGETAYLPCKFTLSPEQDGLDIEWLIS 60
QY 64 -----KKLGRSVSVFYQOQLQDF-----KNRAEMIDFNIRIKNVTSDAGKYR 108
Db 61 PADNOKVDQ-VIILYSGDKIYDYPDLKGRVHFTSNDLKSGDASINVTNLQLSDITGYQ 119
QY 109 CFSVAPSEQGNLEEDTTLVLELVAPVSPSCVPSSALSSTGTVVRLRCQDKEGNPAPEYTW 168
Db 120 CKV-----KAPGVANKKHLVVRPVGARCYVDGSEEGISGDFKICEPKESLPLQYEW 175
QY 169 FXDGIIRLLENPRLGSGSTNSSTYMTKTGTLQNTVSKLDTGEYSCEARNSVGYRRCPGK 228
Db 176 QK-----LSDSQKMPSTWLAEMTSSVISVKNASSEYSSTYCTVNRVVGSDQCLLR 226
QY 229 RMQVDDNLISGLIA-AVVVALVISVGLGVGYAQRKGYFSKETSFOK 275
Db 227 LNVVPPSKAGLIAGIITGLLALALIGLIIFCCRRK---RREKYEK 271
RESULT 7
FAS2 DROME
ID FAS2 DROME STANDARD; PRT; 873 AA.
AC P34082; P34083; Q9W4M6;
DT 01-FEB-1994 (Rel. 28, Created)
DT 01-FEB-1994 (Rel. 28, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Fasciclin II precursor (FAS II).
GN FAS2 OR EG:EG0007.3 OR CG3665.
OS Drosophila melanogaster (Fruit fly).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
OC Ephydroidea; Drosophilidae; Drosophila.
OX NCBI_TaxID=7227;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2), FUNCTION, SUBCELLULAR LOCATION,
RP AND TISSUE SPECIFICITY.
RC STRAIN=Canton-S;
RX MEDLINE=92005695; PubMed=1913818;
RA Grenningloh G., Rehm E.J., Goodman C.S.;
RT "Genetic analysis of growth cone guidance in Drosophila: fasciclin II
RT functions as a neuronal recognition molecule.";
RL Cell 67:45-57(1991).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Berkely;
RX MEDLINE=20196006; PubMed=10731132;
RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champagne M., Pfeiffer B.D.,
RA Wan K.H., Doyle C., Baxter E.G., Heit G., Nelson C.R., Miklos G.L.G.,
RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfankoch C., Baldwin D.,
RA Balles R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brothier P.,
RA Burtis K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablo B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Durbin K.J., Evangelista C.C., Ferraz C., Ferreira S., Fleischmann W.,
RA Flisler C., Gabriellian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Lasko P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,

RA Palazzolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler P., Shen H.,
RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X.,
RA Wang Z.-Y., Wasserman D.A., Weinstein G.M., Weissenbach J.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhong G., Zhao Q., Zheng L.O.,
RA Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Smith H.O.,
RA Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.,
RT "The genome sequence of *Drosophila melanogaster*."
RL Science 287:2185-2195 (2000).
RN [3]
RP REVISIONS, AND ALTERNATIVE SPLICING.
RC STRAIN=Berkely;
RX MEDLINE=2426069; PubMed=12537572;
RA Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S.,
RA Hradecky P., Huang Y., Kaminker J.S., Milburn G.H., Prochuk S.E.,
RA Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,
RA Bettencourt B.R., Celisner S.E., de Grey A.D.N.J., Drysdale R.A.,
RA Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q.,
RA Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
RA Lewis S.E.;
RT "Annotation of the *Drosophila melanogaster* euchromatic genome: a
RT systematic review."
RL Genome Biol. 3:RESEARCH0083.1-RESEARCH0083.22 (2002).
RN [4]
RP SEQUENCE OF 22-873 FROM N.A.
RC STRAIN=Oregon-R;
RX MEDLINE=20196011; PubMed=10731137;
RA Benos P.V., Gatt M.K., Ashburner M., Murphy L., Harris D.,
RA Bartell B.G., Ferraz C., Vidal S., Brun C., Demailles J., Cadieu E.,
RA Dreano S., Gloux S., Lelaure V., Mottier S., Galibert F., Borkova D.,
RA Minana B., Kafatos F.C., Louis C., Siden-Kiamos I., Bolshakov S.,
RA Papagiannakis G., Spanos L., Cox S., Madieno E., de Pablo B.,
RA Modolell J., Peter A., Schoettler P., Werner M., Mourikoti F.,
RA Beilert N., Dowe G., Schaefer U., Jaecle H., Bucheton A.,
RA Callister D.M., Campbell L.A., Darlamitsou A., Henderson N.S.,
RA McMillan P.J., Salles C., Tait E.A., Valenti P., Saunders R.D.C.,
RA Glover D.M.;
RT "From sequence to chromosome: the tip of the X chromosome of *D.*
RT *melanogaster*."
RL Science 287:2220-2222 (2000).
CC -!- FUNCTION: Neuronal recognition molecule for the MPI axon pathway,
CC pathway recognition for axons during the development of nerve
CC fascicles.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (isoform 1);
CC attached to the membrane by a GPI-anchor (isoform 2).
CC -!- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=3;
CC Comment=Experimental confirmation may be lacking for some
CC isoforms;
CC Name=1; Synonyms=A, Membrane-linked;
CC IsoId=P34082-1; Sequences=Displayed;
CC Name=2; Synonyms=C, Phosphatidylinositol-linked;
CC IsoId=P34082-2; Sequences=VSP_002508, VSP_002509;
CC Name=3; Synonyms=B;
CC IsoId=P34082-3; Sequences=VSP_002506, VSP_002507;
CC -!- TISSUE SPECIFICITY: In embryos, both isoforms are initially
CC expressed on the surface of the axons in the MPI pathway and later
CC on several other longitudinal axon fascicles.
CC -!- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
CC -!- SIMILARITY: Contains 2 fibronectin type III domains.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; M77165; AAA28527.1; -.

DR EMBL; M77165; AAA28528.1; -.
DR AL033125; CAA21825.1; -.
DR EMBL; A5003430; AAP45925.2; -.
DR EMBL; A5003430; AAN09119.1; -.
DR EMBL; A5003430; CAA21826.1; -.
DR PIR; A41054; A41054.
DR FlyBase; FBgn0000635; Fas2.
DR GO; GO:0005886; C:plasma membrane; IDA.
DR GO; GO:0007156; P:homophilic cell adhesion; IDA.
DR GO; GO:0007611; P:learning and/or memory; IMP.
DR GO; GO:0016319; P:mushroom body development; IMP.
DR GO; GO:0008038; P:neuronal cell recognition; IDA.
DR GO; GO:0045473; P:response to ethanol (sensu Insecta); NAS.
DR InterPro; IPR003961; FN III.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_C2.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00041; fn3; 2.
DR Pfam; PF00047; ig; 5.
DR SMART; SM00060; FN3; 2.
DR SMART; SM00408; IGC2; 3.
DR PROSITE; PS00835; IG-LIKE; 5.
KW Cell adhesion; Glycoprotein; Repeat; Alternative splicing;
KW Immunoglobulin domain; Transmembrane; GPI-anchor; Signal;
KW Neurogenesis.
FT SIGNAL 1 28 POTENTIAL
FT CHAIN 29 873 FASCICLIN II.
FT DOMAIN 29 751 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 752 769 POTENTIAL.
FT DOMAIN 770 873 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 31 131 IG-LIKE C2-TYPE 1.
FT DOMAIN 138 223 IG-LIKE C2-TYPE 2.
FT DOMAIN 230 318 IG-LIKE C2-TYPE 3.
FT DOMAIN 323 423 IG-LIKE C2-TYPE 4.
FT DOMAIN 428 520 IG-LIKE C2-TYPE 5.
FT DOMAIN 544 619 FIBRONECTIN TYPE-III 1.
FT DOMAIN 648 705 FIBRONECTIN TYPE-III 2.
FT DISULFID 54 116 POTENTIAL.
FT DISULFID 159 207 POTENTIAL.
FT DISULFID 251 302 POTENTIAL.
FT DISULFID 343 407 POTENTIAL.
FT DISULFID 451 504 POTENTIAL.
FT CARBOHYD 74 74 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 250 250 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 330 330 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 448 448 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 458 458 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 576 576 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT VARSPLIC 737 773 GIDVQVABRQVSSAAIVGIAIGVLLLVVDLLC ->
FT DNPSTSGAAPLAQLLVITALTPTMLLIPPTHTA (in
FT isoform 3).
FT VARSPLIC 774 873 /FTIG=VSP_002506.
FT Missing (in isoform 3).
FT VARSPLIC 738 811 /FTIG=VSP_002507.
FT IDVQVABRQVSSAAIVGIAIGVLLLVVDLLCITVH
FT MGWATMCRAKRSSEIDDEAKLGSGQLVKEP -> ESDS
FT ANNNGLLYSAGFNSGVGLHRLFTTTTATTTTIT
FT SITTTATTITLITATISITLLSVLSMLA (in isoform
FT 2).
FT /FTIG=VSP_002508.
FT Missing (in isoform 2).
FT /FTIG=VSP_002509.
FT S -> R (IN REF. 4; CAA21826).
FT CONFLICT 804 804
FT SEQUENCE 873 AA; 96926 MW; E48F0484CCE62AC9 CRC64;
SQ
Query Match 12.2%; Score 186; DB 1; Length 873;
Best Local Similarity 24.6%; Pred. No. 6.1e-08;
Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;
QY 30 SAPKDDQVVTVXVQEAILACKT---PKTKVSRLEWKLG---RSVSFVYVQOTLQGD 83
DB 142 NAPONQYTLG---QDYVMCEVKADPNPTI----DMLRNGDPITRTNDKYVVT 189

DR	SMART; SM00408; Igc2; 1.
DR	PROSITE; PS50835; IG Like; 2.
KW	Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
KW	Repeat.
FT	SIGNAL
FT	CHAIN
FT	POTENTIAL.
FT	COXSACKIEVIRUS AND ADENOVIRUS RECEPTOR
FT	HOMOLOG.
FT	EXTRACELLULAR (POTENTIAL).
FT	POTENTIAL.
FT	CYTOSOLIC (POTENTIAL).
FT	IG-LIKE C2-TYPE 1.
FT	IG-LIKE C2-TYPE 2.
FT	BY SIMILARITY.
FT	N-LINKED (GLCNAC. .) (POTENTIAL).
FT	CARBOHYD 106 106
FT	CARBOHYD 201 201
FT	CONFLICT 340 365
FT	VV (IN REF. 2 AND 3)
FT	VAAPNLISMGAVPVMPAQSGDSIV -> PKYAYKTDGIT
FT	SEQUENCE 365 AA; 39947 MW; 5445B4B5A34B2A2 CRC64;
Qy	Query Match 11.8%; Score 180; DB 1; Length 365;
Db	Beat Local Similarity 23.7%; Pred. No. 6.8e-08;
Qy	Matches 75; Conservative 44; Mismatches 130; Indels 68; Gaps 9
Qy	28 GFSAPOQQVVTVXVQEAILACK---TPKKTVXRLEW-----KKLGRSVSFY---- 74
Db	19 GLSITTTPEQRKEAKGETAYLPFCFKTSLSPDOGFLDIEMWLPSDNQIVDVQVILYSGDK 78
Qy	75 ----YQQTLOQDF---KNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEOGQNLEEDTVT 127
Db	79 IYDNYVPDLKGRVHFTSNVYKSGDASINVTLQLSDITGYOCKV---KKAPGVANKFEL 134
Qy	128 LEVLVAFAVPSCEVPSSALSTGVVELRCQDKEGNPAPETWFGDIRLLENPRLGQSQSTN 187
Db	135 LTVLVKPSGRFCFVDGSGEIGNDFKLCKEPKESGLPLQFEW-----QKLS 179
Qy	188 SSYTMNT-----KTGTLLQFNVTSKLDTGEYSCEARNSGYRRCPGKRMQVDDLNIIGII 241
Db	180 DSQMPTFWLAEMTSPIVSIKVASSESGYISCTVQNRVGSDQCMRLDVDVPPSNRAGTI 239
Qy	242 AAVVV-----VALVISVCGLGVCYAQR-----KGVFSEKTSFPQKSNS 278
Db	240 AGAVIGTLLALVLGAILFCCHKRRREEKEYEHVDIREDDVPFKRTSTARSYGNSH 299
Qy	279 SSKATHTSENDFKHITS 295
Db	300 SSLGSMSPSNMEGYSKT 316
RESULT 9	
ID	_UN89 CAEEL STANDARD; PRT; 6632 AA.
AC	OUI761; Q17362;
DT	15-SEP-2003 (Rel. 42, Created)
DT	15-SEP-2003 (Rel. 42, Last sequence update)
DE	15-SEP-2003 (Rel. 42, Last annotation update)
DE	Muscle M-line assembly protein unc-89 (Uncoordinated protein 89).
GN	UNC-89 OR C99D1.1.
OS	Caenorhabditis elegans.
OC	Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditiida; Rhabditoidea;
OC	Rhabditiidae; Peloderinae; Caenorhabditis.
NCBI_TaxID=6239;	[1]
RP	SEQUENCE FROM N.A., FUNCTION, AND TISSUE SPECIFICITY.
RC	STRAIN=Bristol N2;
RX	MEDLINE=96180278; PubMed=8603916;
RA	Benian G.M., Tinley T.L., Tang X.; Borodovsky M.;
RT	"The Caenorhabditis elegans gene unc-89, required for muscle M-line
RT	assembly, encodes a giant modular protein composed of Ig and signal
RL	transduction domains";
RN	J. Cell Biol. 132:835-848(1996). [2]

RC STRAIN=Bristol N2;
RA Du Z., Le T.T., Wilson R.;
RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
RN [3]
RP REVISIONS.
RA Waterston R.;
RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: Structural component of the muscle M-line. Myofibrillar
CC lattice assembly begins with positional cues laid down in the
CC basement membrane and muscle cell membrane. UNC-89 responds to
CC these signals, localizes, and then participates in assembling an
CC M-line.
CC
CC -1- TISSUE SPECIFICITY: Localizes to the middle of A-bands.
CC
CC -1- SIMILARITY: Contains 1 DBL-homology (DH) domain.
CC
CC -1- SIMILARITY: Contains 1 fibronectin type III domain.
CC
CC -1- SIMILARITY: Contains 49 immunoglobulin-like C2-type domains.
CC
CC -1- SIMILARITY: Contains 1 PH domain.
CC
CC -1- SIMILARITY: Contains 5 RCSD domains.
CC
CC -1- SIMILARITY: Contains 1 SH3 domain.
CC
CC -----
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CC -----
CC EMBL; U33058; AAB00542.1; --
CC EMBL; AF003131; AAB54132.2; --
CC PDB; 1FHO; 20-DEC-00.
CC WormPep; C09D1.1; CE30426.
CC InterPro; IPR003961; FN III.
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR003598; Ig_c2.
CC InterPro; IPR003006; Ig_MHC.
CC InterPro; IPR001849; PH.
CC InterPro; IPR007850; RCSD.
CC InterPro; IPR000219; RhoGEF.
CC InterPro; IPR001452; SH3.
CC Pfam; PF00041; fn3; 1.
CC Pfam; PF00047; ig; 47.
CC Pfam; PF00169; PH; 1.
CC Pfam; PF05177; RCSD; 5.
CC Pfam; PF00621; RhoGEF; 1.
CC Pfam; PF00018; SH3; 1.
CC SMART; SM00408; IGC2; 23.
CC SMART; SM00325; RhoGEF; 1.
CC SMART; SM00326; SH3; 1.
CC PROSITE; PS50010; DH 2; 1.
CC PROSITE; PS50835; IG LIKE; 49.
CC PROSITE; PS50003; PH DOMAIN; 1.
CC PROSITE; PS50002; SH3; 1.
CC Muscle protein; immunoglobulin domain; Repeat; SH3 domain;
KW 3D-structure.
FT DOMA.N 63 127 SH3.
FT DOMA.N 152 330 DH.
FT DOMA.N 342 498 PH.
FT DOMA.N 547 633 IG-LIKE C2-TYPE 1.
FT DOMA.N 648 736 IG-LIKE C2-TYPE 2.
FT DOMA.N 748 838 IG-LIKE C2-TYPE 3.
FT DOMA.N 946 1033 IG-LIKE C2-TYPE 4.
FT DOMA.N 1044 1132 IG-LIKE C2-TYPE 5.
FT DOMA.N 1140 1227 IG-LIKE C2-TYPE 6.
FT DOMA.N 1272 1315 THR-RICH.
FT DOMA.N 1375 1475 RCSD 1.
FT DOMA.N 1479 1585 RCSD 2.
FT DOMA.N 1597 1695 RCSD 3.
FT DOMA.N 1700 1799 RCSD 4.
FT DOMA.N 1800 1860 RCSD 5.
FT DOMA.N 1982 2067 IG-LIKE C2-TYPE 7.
FT DOMA.N 2071 2163 IG-LIKE C2-TYPE 8.
FT DOMA.N 2171 2261 IG-LIKE C2-TYPE 9.

FT DOMAIN 2269 2359 IG-LIKE C2-TYPE 10.
FT DOMAIN 2367 2455 IG-LIKE C2-TYPE 11.
FT DOMAIN 2463 2564 IG-LIKE C2-TYPE 12.
FT DOMAIN 2563 2651 IG-LIKE C2-TYPE 13.
FT DOMAIN 2657 2746 IG-LIKE C2-TYPE 14.
FT DOMAIN 2754 2858 IG-LIKE C2-TYPE 15.
FT DOMAIN 2887 2980 IG-LIKE C2-TYPE 16.
FT DOMAIN 2994 3081 IG-LIKE C2-TYPE 17.
FT DOMAIN 3087 3183 IG-LIKE C2-TYPE 18.
FT DOMAIN 3189 3280 IG-LIKE C2-TYPE 19.
FT DOMAIN 3286 3376 IG-LIKE C2-TYPE 20.
FT DOMAIN 3384 3469 IG-LIKE C2-TYPE 21.
FT DOMAIN 3482 3572 IG-LIKE C2-TYPE 22.
FT DOMAIN 3580 3667 IG-LIKE C2-TYPE 23.
FT DOMAIN 3686 3777 IG-LIKE C2-TYPE 24.
FT DOMAIN 3817 3908 IG-LIKE C2-TYPE 25.
FT DOMAIN 3920 4009 IG-LIKE C2-TYPE 26.
FT DOMAIN 4018 4106 IG-LIKE C2-TYPE 27.
FT DOMAIN 4109 4201 IG-LIKE C2-TYPE 28.
FT DOMAIN 4212 4297 IG-LIKE C2-TYPE 29.
FT DOMAIN 4302 4387 IG-LIKE C2-TYPE 30.
FT DOMAIN 4400 4485 IG-LIKE C2-TYPE 31.
FT DOMAIN 4489 4580 IG-LIKE C2-TYPE 32.
FT DOMAIN 4588 4678 IG-LIKE C2-TYPE 33.
FT DOMAIN 4681 4771 IG-LIKE C2-TYPE 34.
FT DOMAIN 4873 4961 IG-LIKE C2-TYPE 35.
FT DOMAIN 4965 5057 IG-LIKE C2-TYPE 36.
FT DOMAIN 5067 5160 IG-LIKE C2-TYPE 37.
FT DOMAIN 5171 5260 IG-LIKE C2-TYPE 38.
FT DOMAIN 5277 5366 IG-LIKE C2-TYPE 39.
FT DOMAIN 5383 5472 IG-LIKE C2-TYPE 40.
FT DOMAIN 5487 5578 IG-LIKE C2-TYPE 41.
FT DOMAIN 5595 5685 IG-LIKE C2-TYPE 42.
FT DOMAIN 5701 5790 IG-LIKE C2-TYPE 43.
FT DOMAIN 5815 5904 IG-LIKE C2-TYPE 44.
FT DOMAIN 5925 6014 IG-LIKE C2-TYPE 45.
FT DOMAIN 6038 6130 IG-LIKE C2-TYPE 46.
FT DOMAIN 6150 6239 IG-LIKE C2-TYPE 47.
FT DOMAIN 6275 6368 FIBRONECTIN TYPE-III.
FT DOMAIN 6413 6502 IG-LIKE C2-TYPE 48.
FT DOMAIN 6507 6596 IG-LIKE C2-TYPE 49.
FT DISULFID 568 621 POTENTIAL.
FT DISULFID 2908 2975 POTENTIAL.
FT DISULFID 3015 3065 POTENTIAL.
FT DISULFID 3707 3759 POTENTIAL.
FT DISULFID 3826 3890 POTENTIAL.
FT DISULFID 5092 5157 POTENTIAL.
FT DISULFID 5298 5350 POTENTIAL.
FT DISULFID 5508 5560 POTENTIAL.
FT DISULFID 5616 5669 POTENTIAL.
FT DISULFID 5722 5764 POTENTIAL.
FT DISULFID 5836 5901 POTENTIAL.
FT DISULFID 5946 5998 POTENTIAL.
FT DISULFID 6036 6171 POTENTIAL.
FT DISULFID 6421 6486 POTENTIAL.
FT CONFLICT 2137 2137 A -> P (IN REF. 1).
FT CONFLICT 2245 2247 AXA -> PKP (IN REF. 1).
FT CONFLICT 2258 2258 A -> P (IN REF. 1).
FT CONFLICT 2284 2284 E -> G (IN REF. 1).
FT CONFLICT 2297 2297 M -> I (IN REF. 1).
FT CONFLICT 3531 3531 A -> G (IN REF. 1).
FT CONFLICT 3884 3888 DAGEY -> RRRRI (IN REF. 1).
FT CONFLICT 3929 3929 A -> V (IN REF. 1).
FT CONFLICT 5134 5134 A -> P (IN REF. 1).
FT CONFLICT 5145 5145 T -> S (IN REF. 1).
FT CONFLICT 5185 5185 G -> A (IN REF. 1).
FT CONFLICT 5199 5199 K -> N (IN REF. 1).
FT CONFLICT 5202 5202 L -> F (IN REF. 1).
FT CONFLICT 5213 5213 F -> L (IN REF. 1).
FT CONFLICT 6178 6178 A -> G (IN REF. 1).
FT CONFLICT 6268 6268 K -> E (IN REF. 1).
SQ SEQUENCE 6632 AA; 731665 MW; 262D3EDD62960B89 CRC64;

Query Match 11.2%; Score 171; DB 1; Length 6632;
Best Local Similarity 28.1%; Pred. No. 1.3e-05;
Matches 61; Conservative 29; Mismatches 75; Indels 52; Gaps 11;
QY 28 GFSAPKQDOVV---TAVYQEAAILACKTPKTVXRLEWKKLGRSVFVYQOTLQGDPK 84
DB 3813 GRGAPEFVELLRSCVTTEKQQAICKV-KGSPRPKIKWTKGKQVEM-----SAR 3862
QY 85 NAEAMID---FNIRIKNTRSDAGKYRCEVSAPSEOGQNLIEDTTLVLVAPVPSCEV 141
DB 3863 VRAEHKDGTLTLFDNVTQADAGEYRCE--AENEYGSAMTGEPIIVTLEGAPKIDG-EA 3919
QY 142 P-----SSALSGTVVVELRCQDKEGNPAPEYTFWKDGIRLLENPRLGSO 186
DB 3920 PDFLQPKPVPVTVGETAVLECKI-----SGKPKSPVKWYKNGEELKPSDRVKIE--- 3969
QY 187 NSSYMTNTKTLQFN-TVSKL-DTGEVSCBARNVSG 221
DB 3970 -----NLDDGTQRLTVTNKLLDDMDYRCEASNEFG 4000

RESULT 10

CEA6_HUMAN
ID CEA6_HUMAN STANDARD; PRT; 344 AA.
AC P40199; Q14920;
DT 01-FEB-1995 (Rel. 31, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Carcinoembryonic antigen-related cell adhesion molecule 6 precursor
DE (Normal cross-reacting antigen) (Nonspecific crossreacting antigen)
DE (CD66c antigen).
GN CEA6 OR NCA.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBT_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=89122014; PubMed=3220478;
RA Barnett T., Goebel S.J., Nothdurft M.A., Elting J.J.;
RT "Carcinoembryonic antigen family: characterization of cDNAs coding
RT for NCA and CEA and suggestion of nonrandom sequence variation in
RT their conserved loop-domains.";
RL Genomics 3:59-66 (1988).
RN [2]
RP SEQUENCE FROM N.A.
RX TISSUE=Lung carcinoma;
RX MEDLINE=89106638; PubMed=3337731;
RA Tawaragi Y., Oikawa S., Matsuoka Y., Kosaki G., Nakazato H.;
RT "Primary structure of nonspecific crossreacting antigen (NCA), a
RT member of carcinoembryonic antigen (CEA) gene family, deduced from
RT cDNA sequence.";
RL Biochem. Biophys. Res. Commun. 150:89-96 (1988).
RN [3]
RP SEQUENCE FROM N.A.
RX TISSUE=Pancreas;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J.J., Heideh F.,
RA Datchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Scapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaby S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Vallalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Faney J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY. CEA
CC SUBFAMILY.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -!- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
CC -!- DATABASE: NAME=PROW; NOTE=CD guide CD66c entry;
CC WWW="http://www.ncbi.nlm.nih.gov/prov/cd/cd66c.htm".
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; M29541; AAA59915.1; -;
CC EMBL; M18728; AAA59907.1; -;
CC EMBL; BC005008; AAH05008.1; -;
CC Genew; HGNC:1818; CEACAM6.
CC MIM; 163980; -;
CC GO; GO:0005887; C:integral to plasma membrane; TAS.
CC GO; GO:0007267; P:cell-cell signaling; TAS.
CC GO; GO:0007185; P:signal transduction; TAS.
CC InterPro; IPR007110; IG-like.
CC InterPro; IPR003598; IG_c2.
CC InterPro; IPR003006; IG_MHC.
CC Pfam; PF00047; Ig_3.
CC SMART; SM00408; IGG2; 1.
CC PROSITE; PS50835; IG_LIKE; 2.
KW Immunoglobulin domain; Antigen; Signal; Glycoprotein; GPI-anchor;
KW Repeat.
FT SIGNAL 1 34 BY SIMILARITY.
FT CHAIN 35 320 CARCINOEMBRYONIC ANTIGEN-RELATED CELL
FT PROPEP 321 344 ADHESION MOLECULE 6.
FT LIPID 320 320 REMOVED IN MATURE FORM (BY SIMILARITY).
FT DOMAIN 35 142 GPI-ANCHOR (BY SIMILARITY).
FT DOMAIN 145 232 IG-LIKE V-TYPE.
FT DOMAIN 237 314 IG-LIKE C2-TYPE 1.
FT DISULFID 167 215 IG-LIKE C2-TYPE 2.
FT DISULFID 259 299 PROBABLE.
FT CARBOHYD 104 104 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 111 111 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 115 115 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 152 152 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 173 173 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 197 197 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 224 224 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 256 256 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 274 274 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 288 288 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 292 292 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 309 309 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CONFLICT 138 138 F -> L (IN REF. 1).
FT CONFLICT 239 239 V -> G (IN REF. 1).
SQ SEQUENCE 344 AA; 37237 MW; 4322C5D6E25849F5 CRC64;
Query Match 10.8%; Score 164; DB 1; Length 344;
Best Local Similarity 29.0%; Pred. No. 1.4e-06;
Matches 49; Conservative 25; Mismatches 61; Indels 34; Gaps 8;
QY 91 DFNIRIKNTRSDAGKYRCEVSAPSEOGQNLIEDTTLVLVAPVPSCEVPSA--LSG 148
DB 197 NMTLTLLSVKENDAGSVECIQNPASNRS---DPVTILNVLVGDVDTIS-PSKANYRPG 252
QY 149 TVVELRCQDKEGNPAPEYTFWKDGIRLLENPRLGSOQTSNSSYTMNTKTLQFNVTSKLD 208
DB 253 ENLNLSCH-AASNPPAQYSWFG-----TFQOSTQELFIPNITVNN 293

Db 260 KGSNTLTVR-----NIINK-DGGSYVCKATNKAG 288

RESULT 13

NRG2_RAT

ID NRG2_RAT STANDARD; PRT; 868 AA.

AC 035569; 035073; 035570; 035571; 035572;

DT 15-DEC-1998 (Rel. 37, Created)

DT 15-DEC-1998 (Rel. 37, Last sequence update)

DT 15-SEP-2003 (Rel. 42, Last annotation update)

DE Pro-neuregulin-2 precursor (Pro-NRG2) [Contains: Neuregulin-2 (NRG-2)

DE (Neural- and thymus-derived activator for ERBB kinases) (NTAK)].

GN NRG2 OR NTAK.

OS Rattus norvegicus (Rat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

OX NCBI_TaxID=10116;

RN [1]

RX MEDLINE=98006324; PubMed=9349101;

RA Higashiyama S., Horikawa M., Yamada K., Ichino N., Nakano N.,

RA Nakagawa T., Miyagawa J., Matsushita N., Nagatsu T., Taniguchi N.,

RA Ishiguro H.;

RT "A novel brain-derived member of the epidermal growth factor family

RT that interacts with ErbB3 and ErbB4.";

RL J. Biochem. 122:675-680(1997).

RN [2]

RP SEQUENCE OF 109-868 FROM N.A. (ISOFORMS 6 AND 7).

RC TISSUE=Cerebellum;

RX MEDLINE=97311397; PubMed=9168114;

RA Chang H., Riese D.J. II, Gilbert W., Stern D.F., McMahon U.J.;

RT "Ligands for ErbB-family receptors encoded by a neuregulin-like

RT gene.";

RL Nature 387:509-512(1997).

CC -!- FUNCTION: DIRECT LIGAND FOR ERBB3 AND ERBB4 TYROSINE KINASE

CC RECEPTORS. CONCOMITANTLY RECRUITS ERBB1 AND ERBB2 CORECEPTORS,

CC RESULTING IN LIGAND-STIMULATED TYROSINE PHOSPHORYLATION AND

CC ACTIVATION OF THE ERBB RECEPTORS. MAY ALSO PROMOTE THE

CC HETERODIMERIZATION WITH THE EGF RECEPTOR.

CC -!- SUBCELLULAR LOCATION: EXISTS AS AN TYPE I MEMBRANE PROTEIN AND AS

CC A PROTEOLYTICALLY RELEASED SOLUBLE GROWTH FACTOR FORM. THE

CC MEMBRANE-BOUND FORM DOES NOT SEEM TO BE ACTIVE (BY SIMILARITY).

CC -!- ALTERNATIVE PRODUCTS:

CC Event=Alternative splicing; Named isoforms=7;

CC Comment=Additional isoforms seem to exist. The alpha-type and

CC beta-type differ in the EGF-LIKE domain;

CC Name=1; Synonyms=NTAK-alpha1;

CC IsoId=035569-1; Sequence=Displayed;

CC Name=2; Synonyms=NTAK-alpha2A;

CC IsoId=035569-2; Sequence=VSP_003471;

CC Name=3; Synonyms=NTAK-alpha2B, NTAK-alpha2-1P;

CC IsoId=035569-3; Sequence=VSP_003466, VSP_003471;

CC Name=4; Synonyms=NTAK-beta;

CC IsoId=035569-4; Sequence=VSP_003470;

CC Name=5; Synonyms=NTAK-gamma;

CC IsoId=035569-5; Sequence=VSP_003467, VSP_003468;

CC Name=6; Synonyms=NRG2-alpha;

CC IsoId=035569-6; Sequence=VSP_003472, VSP_003473;

CC Name=7; Synonyms=NRG2-beta;

CC IsoId=035569-7; Sequence=VSP_003465, VSP_003469;

CC -!- TISSUE SPECIFICITY: EXPRESSED IN MOST PARTS OF THE BRAIN,

CC ESPECIALLY THE OLFACTORY BULB AND CEREBELLUM WHERE IT LOCALIZES IN

CC GRANULE AND PURKINJE CELLS. IN THE HIPPOCAMPUS, FOUND IN THE

CC GRANULE CELLS OF THE DENTATE GYRUS. IN THE BASAL FOREBRAIN, FOUND

CC IN THE CHOLINERGIC CELLS. IN THE HINDBRAIN, WEAKLY DETECTABLE IN

CC THE MOTOR TRIGEMINAL NUCLEUS. NOT DETECTED IN THE HYPOTHALAMUS.

CC ALSO FOUND IN THE LIVER AND IN THE THYMUS. NOT DETECTED IN HEART,

CC ADRENAL GLAND, OR TESTIS.

CC -!- DEVELOPMENTAL STAGE: IN THE EMBRYO, EXPRESSED IN THE BRAIN OF

CC E11.5 EMBRYOS WHERE IT IS FOUND IN THE TELENCEPHALON, BUT NOT IN

CC THE HINDBRAIN. NOT FOUND IN THE HEART. IN THE ADULT, FOUND IN

CC BRAIN AND THYMUS.

CC -!- DOMAIN: THE CYTOPLASMIC DOMAIN MAY BE INVOLVED IN THE REGULATION

CC OF TRAFFICKING AND PROTEOLYTIC PROCESSING. REGULATION OF THE

CC PROTEOLYTIC PROCESSING INVOLVES INITIAL INTRACELLULAR DOMAIN

CC DIMERIZATION (BY SIMILARITY).

CC -!- DOMAIN: ERBB RECEPTOR BINDING IS ELICITED ENTIRELY BY THE EGF-LIKE

CC DOMAIN (BY SIMILARITY).

CC -!- PTM: PROTEOLYTIC CLEAVAGE CLOSE TO THE PLASMA MEMBRANE ON THE

CC EXTERNAL FACE LEADS TO THE RELEASE OF THE SOLUBLE GROWTH FACTOR

CC FORM (BY SIMILARITY).

CC -!- PTM: EXTENSIVE GLYCOSYLATION PRECEDES THE PROTEOLYTIC CLEAVAGE (BY

CC SIMILARITY).

CC -!- SIMILARITY: Contains 1 EGF-like domain.

CC -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.

CC -!- SIMILARITY: BELONGS TO THE NEUREGULIN FAMILY.

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CC -----

CC ENBL; D89995; BAA23344.1; -

CC ENBL; D89996; BAA23345.1; -

CC ENBL; D89997; BAA23346.1; -

CC ENBL; D89998; BAA23347.1; -

CC ENBL; AB001576; BAA23348.1; -

CC PIR; JCS701; JCS701.

CC PIR; JCS702; JCS702.

CC HSSP; Q12784; LHRE.

CC InterPro: IPR006209; EGF like.

CC InterPro: IPR006210; IEGF.

CC InterPro: IPR007110; Ig-like.

CC InterPro: IPR003598; Ig_c2.

CC InterPro: IPR003006; Ig_MHC.

CC InterPro: IPR002154; Neuregulin.

CC Pfam; PF00008; EGF; 1.

CC Pfam; PF00047; ig; 1.

CC Pfam; PF02158; Neuregulin; 1.

CC SMART; SM00181; EGF; 1.

CC SMART; SM00408; Ig_c2; 1.

CC PROSITE; PS00022; EGF_1; 1.

CC PROSITE; PS01186; EGF_2; 1.

CC PROSITE; PS0835; IG_LIKE; 1.

CC Growth factor; EGF-like domain; Immunoglobulin domain; Glycoprotein;

CC Transmembrane; Multigene family; Alternative splicing.

FT PROPEP 1 127 PRO-NEUREGULIN-2, MEMBRANE-BOUND FORM.

FT CHAIN 128 868 NEUREGULIN-2.

FT CHAIN 128 428 EXTRACELLULAR (POTENTIAL).

FT DOMAIN 128 429 INTERNAL SIGNAL SEQUENCE (POTENTIAL).

FT TRANSMEM 430 450 CYTOPLASMIC (POTENTIAL).

FT DOMAIN 451 868 IG-LIKE C2-TYPE.

FT DOMAIN 253 348 SER/THR-RICH.

FT DOMAIN 346 356 EGF-LIKE.

FT DOMAIN 357 398 POLY-SER.

FT DOMAIN 22 32 POLY-SER.

FT DOMAIN 35 45 POLY-SER.

FT DOMAIN 56 59 POLY-THR.

FT DOMAIN 103 106 POLY-ALA.

FT DOMAIN 739 745 POLY-PRO.

FT DOMAIN 273 327 BY SIMILARITY.

FT DISULFID 361 375 BY SIMILARITY.

FT DISULFID 369 386 BY SIMILARITY.

FT DISULFID 388 397 BY SIMILARITY.

FT CARBOHYD 33 33 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 34 34 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 163 163 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 294 294 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT CARBOHYD 362 362 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT VARSPLIC 1 108 Missing (in isoform 7).

FT VARSPLIC 220 222 /FTID=VSP_003465.

FT VARSPLIC 220 222 PLV -> PFF (in isoform 3).

FT CARBOHYD 254 254 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT FT CARBOHYD 296 296 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT FT VARSPLIC 280 280 C -> G (in isoform NRG2-10).
 FT FT VARSPLIC 281 756 Missing (in isoform NRG2-10).
 FT FT VARSPLIC 282 330 Missing (in isoform NRG2-10).
 FT FT VARSPLIC 331 756 Missing (in isoform DON-1S).
 FT FT VARSPLIC 282 307 VGYTDCRCQCFAMVNFSLKHLGFEKELKE -> NGFFGQRCLEK
 FT FT VARSPLIC 282 307 LPLRLYMDPKQK (in isoform DON-1M).
 FT FT VARSPLIC 282 307 /FTId=VSP_003464.
 SQ SEQUENCE 756 AA; 82213 MW; 51D85DC918B678E CRC64;

Query Match 10.3%; Score 156; DB 1; Length 756;
 Best Local Similarity 27.7%; Pred. No. 1.7e-05;
 Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 66 LGRSVSFVYVYQOTLQGD--FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEE 123
 Db 96 LERNQRIFFLEPTEQPLVFTAFAPVDN--GKNI-KKEVGKILCTDCATRPKLGKMS 152
 QY 124 DTVTLEVLVAPVPSCEVPSSALSGTVVLRCDQEGNPAPEYTFWFGIRLLENPRLGS 183
 Db 153 QTGEV-----GKQSLACEAAGNQPQSYRFRKGKELNR-----S 188
 QY 184 QSTNSVTMTKTTGLTFNTVSKLDTGEYSCEARNVGVYRCPGKRMQVDDLNI-----S 238
 Db 189 RDRIKYGNGRKNSRLQFNKVRVEDAGEYVCEAENILGKOTVRG-RLHVNVSVTSLSSWS 247
 QY 239 GIIAVVVVVAVISVCGLGVCY 260
 Db 248 GHARKCNETAKSYCVNG-GVCY 268

RESULT 15

PTPF HUMAN
 ID PTPF HUMAN STANDARD; PRT; 1897 AA.
 AC P10586;
 DT 01-JUL-1989 (Rel. 11, Created)
 DT 01-JUL-1989 (Rel. 11, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE LAR protein precursor (leukocyte antigen related) (EC 3.1.3.48).
 GN PTPRF OR LAR.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Tonsil;
 RX MEDLINE=90035978; PubMed=2972792;
 RA Streuli M., Krueger N.X., Hall L.R., Schlossman S.F., Saito H.;
 RT "A new member of the immunoglobulin superfamily that has a
 cytoplasmic region homologous to the leukocyte common antigen.";
 RL J. Exp. Med. 168:1523-1530(1988).
 RN [2]
 RP MUTAGENESIS.
 RX MEDLINE=90046860; PubMed=2554325;
 RA Streuli M., Krueger N.X., Tsai A.Y.M., Saito H.;
 RT "A family of receptor-linked protein tyrosine phosphatases in humans
 and Drosophila.";
 RL Proc. Natl. Acad. Sci. U.S.A. 86:8698-8702(1989).
 RN [3]
 RP MUTAGENESIS.
 RX MEDLINE=90316093; PubMed=1695146;
 RA Streuli M., Krueger N.X., Thai T., Tang M., Saito H.;
 RT "Distinct functional roles of the two intracellular phosphatase like
 domains of the receptor-linked protein tyrosine phosphatases LCA and
 LAR.";

Query Match

10.3%; Score 156; DB 1; Length 1897;

EMBO J. 9:2399-2407(1990).
 -!- FUNCTION: IT IS POSSIBLE THAT DLAR IS A CELL ADHESION RECEPTOR.
 IT POSSESSES AN INTRINSIC PROTEIN TYROSINE PHOSPHATASE ACTIVITY
 (PTPASE).
 -!- FUNCTION: THE FIRST PTPASE DOMAIN HAS ENZYMATIC ACTIVITY, WHILE
 THE SECOND ONE SEEMS TO AFFECT THE SUBSTRATE SPECIFICITY OF THE
 FIRST ONE.
 -!- CATALYTIC ACTIVITY: Protein tyrosine phosphate + H(2)O = protein
 tyrosine + phosphate.
 -!- SUBCELLULAR LOCATION: Type I membrane protein.
 -!- SIMILARITY: Contains 3 immunoglobulin-like C2-type domains.
 -!- SIMILARITY: Contains 8 fibronectin type III domains.
 -!- SIMILARITY: Contains 2 protein-tyrosine phosphatase domains.
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 between the Swiss Institute of Bioinformatics and the EMBL outstation -
 the European Bioinformatics Institute. There are no restrictions on its
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 or send an email to license@isb-sib.ch).

 EMBL; Y00815; CAA68754.1; -;
 PIR; S03841; TDHULK.
 PDB; 1LAR; 25-APR-00.
 Genew: HGNC:9670; PTPRF.
 MIM; 179590;
 GO; GO:0005887; C: integral to plasma membrane; TAS.
 GO; GO:0005001; F: transmembrane receptor protein tyrosine pho. .; TAS.
 GO; GO:0007155; P: cell adhesion; TAS.
 GO; GO:0007185; P: transmembrane receptor protein tyrosine pho. .; TAS.
 InterPro; IPR003961; FN III.
 InterPro; IPR003962; FNIII_subd.
 InterPro; IPR007110; Ig-like.
 InterPro; IPR003598; Ig_c2.
 InterPro; IPR003006; Ig_MHC.
 InterPro; IPR000387; TYR_phosphatase.
 InterPro; IPR000242; Tyr_PP.
 Pfam; PF00041; fn3; 7.
 Pfam; PF00047; ig; 3.
 Pfam; PF00102; Y_phosphatase; 2.
 PRINTS; PR00014; FNTYPEIII.
 PRINTS; PR00700; PRTYPHTASE.
 SMART; SM00060; FN3; 4.
 SMART; SM00408; IGc2; 3.
 SMART; SM00194; PTPc; 2.
 PROSITE; PS00835; IG_LIKE; 3.
 PROSITE; PS00383; TYR_PHOSPHATASE_1; 2.
 PROSITE; PS00056; TYR_PHOSPHATASE_2; 2.
 PROSITE; PS00055; TYR_PHOSPHATASE_PTP; 2.
 Hydrolase; Receptor; Glycoprotein; Signal; Transmembrane;
 Cell adhesion; Immunoglobulin domain; Repeat; 3D-structure.
 FT SIGNAL 1 16
 FT CHAIN 17 1897
 FT DOMAIN 17 1250
 FT EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 1251 1274
 FT POTENTIAL.
 FT CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 1275 1897
 FT IG-LIKE C2-TYPE 1.
 FT DOMAIN 23 113
 FT IG-LIKE C2-TYPE 2.
 FT DOMAIN 125 214
 FT IG-LIKE C2-TYPE 3.
 FT DOMAIN 222 304
 FT PROTEIN-TYROSINE PHOSPHATASE 1.
 FT DOMAIN 1360 1606
 FT PROTEIN-TYROSINE PHOSPHATASE 2.
 FT ACT_SITE 1649 1897
 FT BY SIMILARITY.
 FT ACT_SITE 1538 1538
 FT BY SIMILARITY.
 FT CARBOHYD 107 107
 FT N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 240 240
 FT N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 285 285
 FT N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 711 711
 FT N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 956 956
 FT C-S; LOSS OF ACTIVITY.
 FT MUTAGEN 1538 1538
 SQ SEQUENCE 1897 AA; 211844 MW; 439850F1D5C031FF CRC64;

Search completed: December 9, 2003, 17:11:45
Job time : 11.8641 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:08:46 ; Search time 32.1882 Seconds
(without alignments)
2389.068 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 1521

Sequence: 1 MARRSRHRLRLRLVLA.....SSKATTSENDFKTKSFII 298

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 830525

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL 23:*

1: sp_archaea:*

2: sp_bacteria:*

3: sp_fungi:*

4: sp_human:*

5: sp_invertebrate:*

6: sp_mammal:*

7: sp_mhc:*

8: sp_organelle:*

9: sp_phase:*

10: sp_plant:*

11: sp_rodent:*

12: sp_virus:*

13: sp_vertebrate:*

14: sp_unclassified:*

15: sp_rvirus:*

16: sp_bacteriaph:*

17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	1215	79.9	298	11	Q9J159	Q9J159 mus musculus
2	1212	79.7	298	11	Q8CE95	Q8CE95 mus musculus
3	1212	79.7	298	11	Q8CE95	Q8CE95 mus musculus
4	507.5	33.4	181	11	Q9CWD9	Q9CWD9 mus musculus
5	499	32.8	310	11	Q9D8B7	Q9D8B7 mus musculus
6	499	32.8	310	11	Q9EPK4	Q9EPK4 mus musculus
7	496	32.6	310	11	Q9D1M9	Q9D1M9 mus musculus
8	481	31.6	310	4	Q9BX67	Q9BX67 homo sapien
9	481	31.6	355	4	Q8WHL8	Q8WHL8 homo sapien
10	480	31.6	309	4	Q96FL1	Q96FL1 homo sapien
11	421	27.7	300	11	Q9VC39	Q9VC39 mus musculus
12	409.5	26.9	300	11	Q9JHY1	Q9JHY1 rattus norv
13	393.5	25.9	259	4	Q9Y5B2	Q9Y5B2 homo sapien
14	315.5	20.7	173	11	Q9JKD5	Q9JKD5 rattus norv
15	227	14.9	318	13	Q91664	Q91664 xenopus lae
16	225	14.8	335	13	Q9PWR4	Q9PWR4 gallus gall

17	224	14.7	335	13	Q9YGH1	Q9YGH1 gallus gall
18	221	14.5	319	11	Q922D5	Q922D5 mus musculus
19	219	14.4	319	11	Q9JKAS	Q9JKAS mus musculus
20	219	14.4	335	13	Q9YGV5	Q9YGV5 gallus gall
21	217	14.3	181	13	Q91665	Q91665 xenopus lae
22	210	13.8	259	4	Q9Y532	Q9Y532 homo sapien
23	205.5	13.5	319	6	Q9YTU80	Q9YTU80 canis famil
24	202	13.3	390	4	Q96T50	Q96T50 homo sapien
25	202	13.3	390	4	Q96AP7	Q96AP7 homo sapien
26	201.5	13.2	365	6	Q8WV3	Q8WV3 bos taurus
27	201.5	13.2	394	11	Q925F2	Q925F2 mus musculus
28	197	13.0	407	11	Q9D2J4	Q9D2J4 mus musculus
29	195.5	12.9	344	4	Q9UKV4	Q9UKV4 homo sapien
30	195	12.8	390	6	Q95KI3	Q95KI3 macaca fasc
31	194	12.8	372	13	Q90Y50	Q90Y50 brachydanio
32	191	12.6	319	6	Q9TU79	Q9TU79 sus scrofa
33	188	12.4	430	4	Q8N4F1	Q8N4F1 homo sapien
34	186	12.2	773	5	Q8IRS5	Q8IRS5 drosophila
35	183	12.0	300	11	Q9DA22	Q9DA22 mus musculus
36	183	12.0	300	11	Q9D9J0	Q9D9J0 mus musculus
37	180	11.8	352	11	Q91W66	Q91W66 mus musculus
38	180	11.8	365	11	Q9DBJ8	Q9DBJ8 mus musculus
39	179.5	11.8	304	11	Q9CVA4	Q9CVA4 mus musculus
40	179.5	11.8	323	4	Q8NDD2	Q8NDD2 homo sapien
41	177	11.6	284	4	Q9NX42	Q9NX42 homo sapien
42	177	11.6	325	4	Q95791	Q95791 homo sapien
43	177	11.6	327	4	Q96IQ7	Q96IQ7 homo sapien
44	177	11.6	344	11	Q9R067	Q9R067 rattus norv
45	177	11.6	358	11	Q9R066	Q9R066 rattus norv

ALIGNMENTS

RESULT 1

Q9J159	PRELIMINARY;	PRT;	298 AA.
ID	Q9J159		
AC	Q9J159;		
DT	01-OCT-2000 (TREMBLrel. 15, Created)		
DT	01-OCT-2000 (TREMBLrel. 15, Last sequence update)		
DT	01-MAR-2003 (TREMBLrel. 23, Last annotation update)		
DE	Vascular endothelial junction-associated molecule (Junctional adhesion molecule-3) (2410030G21RIK protein).		
GN	JCAM3 OR JCAM2 OR JAM-3 OR 2410030G21RIK.		
OS	Mus musculus (Mouse).		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.		
OX	NCBI_TaxID=10090;		
RN	[1]		
RP	SEQUENCE FROM N.A.		
RC	STRAIN=C57BL/6J;		
RX	MEDLINE=20317114; PubMed=10779521;		
RA	Palmeri D., van Zante A., Huang C.-C., Hemmerich S., Rosen S.D.,		
RT	"Vascular Endothelial Junction-associated Molecule, a Novel Member of the Immunoglobulin Superfamily, Is Localized to Intercellular		
RT	Boundaries of Endothelial Cells.";		
RL	J. Biol. Chem. 275:19139-19145(2000).		
RN	[2]		
RP	SEQUENCE FROM N.A.		
RX	PubMed=11036763;		
RA	Aurand-Lions M.A., Duncan L., Du Pasquier L., Imhof B.A.;		
RT	"Cloning of JAM-2 and JAM-3: an Emerging Junctional Adhesion Molecular Family?";		
RL	Curr. Top. Microbiol. Immunol. 251:91-98(2000).		
RN	[3]		
RP	SEQUENCE FROM N.A.		
RC	STRAIN=C57BL/6J; TISSUE=Embryo, and Embryonic stem cells;		
RX	MEDLINE=21085660; PubMed=11217851;		
RA	Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,		
RA	Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,		
RA	Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,		
RA	Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,		
RA	Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,		

RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuura Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Maehima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sabaki H., Sato K., Schoenbach C., Seya T., Shibata K., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz K., Whittaker C., Wilming L.,
RA Wyszewski-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.;
RA "Functional annotation of a full-length mouse cDNA collection";
RL Nature 409:685-690(2001).
DR EMBL; AF255911; AAF81224.1; -;
DR EMBL; AJ291757; CAC20699.1; -;
DR EMBL; AK013914; BAB29053.1; -;
DR EMBL; AK010616; BAB27064.1; -;
DR MGD; MGI:1933820; Jcam2.
DR MGD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00047; Ig; 2.
DR PROSITE; PS50835; IG LIKE; 2.
SQ SEQUENCE 298 AA; 33047 MW; 1124E0F07E6CF751 CRC64;

Query Match 79.9%; Score 1215; DB 11; Length 298;
Best Local Similarity 78.6%; Pred. No. 1.9e-104;
Matches 235; Conservative 25; Mismatches 37; Indels 2; Gaps 2;

Qy 1 MARRSRHRLLLRLYLVALGYHKA YGFSAPKD-QQVTVAVXQOEAILACKTPKKT VXS 59
Db 1 MARSPOGLMLLLHLHYLVALDYHKANGFSAS KDHQREVTVIEFQEA LACKTPKKTSS 60

Qy 60 RLEWKKLGRSVSFVYYQQTLOGDPFNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPS EQG 119
Db 61 RLEWKVGGVSLVYQQALQGD FKDRAEMIDFNIRIKNVT RSDAGKYRCEVSAPS EQG 120

Qy 120 NLEEDTVTLVLVAPVPSCVPSSALSGTVVELRCQDKEGN PAPERPTWFKDGI RLLENP 179
Db 121 NLQEDKVMLEVLVAPVACEVPTSVMTGVSVELRCQDKEGN PAPERPTWFKDGI RLLENP 180

Qy 180 RLGSQSTNSSTYNTKTGTLOFNVTSKLDTGEYSCEARN SVGYRRCPCGKMQVDDL NISG 239
Db 181 K-GGTHNNSSTYNTKTGTLOFNVTSKLDTGEYSCEARN SVGYRRCPCGKMQVDDL NISG 239

Qy 240 IIAAVVVVALVISVCGLGVCYAQRKGYSKTSFKSNSSSKAT TMSNDPKHTKSFII 298
Db 240 IIAATVVVAVFISVCGLGTCYAQRKGYSKTSFKSNSSSKAT TMSNDPKHTKSFII 298

RESULT 2
Q8CE95 PRELIMINARY; PRT; 298 AA.
AC Q8CE95;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DE Junction cell adhesion molecule 2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Medulla oblongata;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; AK078128; BAC37139.1; -;
SQ SEQUENCE 298 AA; 33182 MW; 1131F0BF89CEB51 CRC64;

Query Match 79.7%; Score 1212; DB 11; Length 298;
Best Local Similarity 78.6%; Pred. No. 3.5e-104;
Matches 235; Conservative 25; Mismatches 37; Indels 2; Gaps 2;

Qy 1 MARRSRHRLLLRLYLVALGYHKA YGFSAPKD-QQVTVAVXQOEAILACKTPKKT VXS 59
Db 1 MARSPOGLMLLLHLHYLVALDYHKANGFSAS KDHQREVTVIEFQEA LACKTPKKTSS 60

Qy 60 RLEWKKLGRSVSFVYYQQTLOGDPFNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPS EQG 119
Db 61 RLEWKVGGVSLVYQQALQGD FKDRAEMIDFNIRIKNVT RSDAGKYRCEVSAPS EQG 120

Qy 120 NLEEDTVTLVLVAPVPSCVPSSALSGTVVELRCQDKEGN PAPERPTWFKDGI RLLENP 179
Db 121 NLQEDKVMLEVLVAPVACEVPTSVMTGVSVELRCQDKEGN PAPERPTWFKDGI RLLENP 180

Qy 180 RLGSQSTNSSTYNTKTGTLOFNVTSKLDTGEYSCEARN SVGYRRCPCGKMQVDDL NISG 239
Db 181 K-GGTHNNSSTYNTKTGTLOFNVTSKLDTGEYSCEARN SVGYRRCPCGKMQVDDL NISG 239

Qy 240 IIAAVVVVALVISVCGLGVCYAQRKGYSKTSFKSNSSSKAT TMSNDPKHTKSFII 298
Db 240 IIAATVVVAVFISVCGLGTCYAQRKGYSKTSFKSNSSSKAT TMSNDPKHTKSFII 298

RESULT 2
Q8CE95 PRELIMINARY; PRT; 298 AA.
AC Q8CE95;
DT 01-MAR-2003 (TrEMBLrel. 23, Created)
DT 01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
DE Junction cell adhesion molecule 2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Skin;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).


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RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayaahizaki Y.,
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AK003326; BAB2215.1; -.
DR MGD; MGI:1933820; Jcam3.
DR GMD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig_c2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; Igc2; 1.
DR PROSITE; PS0835; IG_LIKE; 2.
KW Immunoglobulin domain.
SQ SEQUENCE 310 AA; 34819 MW; 6692B2CAD68EA4B1D CRC64;

Query Match 32.6%; Score 496; DB 11; Length 310;
Best Local Similarity 37.0%; Pred. No. 1e-37;
Matches 117; Conservative 61; Mismatches 112; Indels 26; Gaps 9;

QY 1 MARRSRHRL-----L L L L L R Y L V V A L G Y H K A Y G F S A P K D Q Q V V T A V Y Q E A I L A C - K 51
Db 3 LSRRLRLRLARLPDFFLLLRGCM-----EAVNLKSSNRNPVH--EFESVELSCII 55

QY 52 TP K K T V X S R L E W K K L - G R S V S F V Y Y Q O T L Q G D F K N R A E M I - D F N I R I K N V T R S D A G K Y R C 109
Db 56 T D S Q T S D P R I E W K K I Q D G T T Y V F D N K I Q G D L A G R T D V F G K T S L R I W N V T R S D A I Y R C 115

QY 110 E V S A P S E Q Q N L E E D T V T L E V L V A P V P S C E V P S S A L S G T V V E L R C O D K E G N P A P E Y T W F 169
Db 116 E V A L N D R - K E I D E I V I E L T V Q V K P T P V C R I P A V P V G K M A T L H C Q E S E G Y P R P H Y S W Y 174

QY 170 K D G I R L L E N P R L G S Q T N S S Y T W N T K T G T L Q F N T V S K L D T G E Y S C E A R N S V G Y R R C P G K R 229
Db 175 R N D V L P T D S R A N P R F Q N S S F H V N S E T G L V F N A V H K D S G Q Y Y C I A S N D A G A R C E G Q D 234

QY 230 M Q V D D L N I S G I I A A V V V A L V I S V C G L G V C Y A O R K G Y F - - S K E - - - - - T S F Q K S N S S X A 282
Db 235 M E Y D L N I A G I I G G V L V L A V I A V T M G I C C A Y R R G C F I S S K Q D G S Y K S P G K H D G V N Y I 294

QY 283 T T M S E N D F K H T K S F I I 298
Db 295 R T S E G D F R H K S F V I 310

RESULT 8
Q9BX67 PRELIMINARY; PRT; 310 AA.
AC Q9BX67;
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule 3 precursor (Junctional adhesion molecule-2) (Junctional adhesion molecule-3) (Hypothetical protein FLJ39288) (Hypothetical protein FLJ90828).
GN JAM-2 OR JAM3.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Cunningham S.A., Arrate M.P., Tran T.M.;
RC Cloning of Human Junctional Adhesion Molecule 3.;
RT "Cloning of Human Junctional Adhesion Molecule 3.";
RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA Aurrand-Lions M.A., Johnson-leger C., Wong C., Dupasquier L.;
RT "Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members.";
RT Junction adhesion molecule 3.
RL Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.

[3]
RP SEQUENCE FROM N.A.
RA Aurrand-Lions M.A., Johnson-leger C., Lamagna C., Ozaki H., Kita T.;
RT "Junctional adhesion molecules (JAMs) and interendothelial junctions.";
RL Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA Sachs U.J.H., Eva O., Berghoefer H., Santoso S.;
RT "Characterization of Junctional Adhesion Molecule-3 on Human Platelets: A New Member of Immunoglobulin Superfamily.";
RL Submitted (NOV-2001) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA Tsogai T., Ota T., Nishikawa T., Hayaashi K., Otsuki T., Sugiyama T., Suzuki Y., Nagai K., Sugano S., Ishii S., Kawai-Hio Y., Saito K., Yamamoto J., Wakamatsu A., Nakamura Y., Kojima S., Nagahari K., Masuho Y., Ono T., Okano K., Yoshikawa Y., Aotsuka S., Sasaki N., Hattori A., Okumura K., Iwayanagi T., Ninomiya K.;
RT "NEDO human cDNA sequencing project.";
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF356518; AAK27221.1; -.
DR EMBL; AJ344431; CAC69845.1; -.
DR EMBL; AF448478; AAM20925.1; -.
DR EMBL; AK074769; BAC11195.1; -.
DR EMBL; AK075309; BAC11538.1; -.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR PROSITE; PS0835; IG_LIKE; 2.
KW Hypothetical protein; Signal.
FT SIGNAL 1 30
SQ SEQUENCE 310 AA; 35020 MW; CE39ADF33EALDAB9 CRC64;

Query Match 31.6%; Score 481; DB 4; Length 310;
Best Local Similarity 35.8%; Pred. No. 2.5e-36;
Matches 114; Conservative 60; Mismatches 116; Indels 28; Gaps 10;

QY 1 MARRSRHRL-----L L L L L R Y L V V A L G Y H K A Y G F S A P K D Q Q V V T A V Y Q E A I L A C 50
Db 1 MARRPPRLRLCARLPDFFLLLRGCLIG-----AVNLKSSNRTPVQ--EFESVELSC 53

QY 51 -KTPKKT V X S R L E W K K L - G R S V S F V Y Y Q O T L Q G D F K N R A E M I - D F N I R I K N V T R S D A G K Y 107
Db 54 I I T D S Q T S D P R I E W K K I Q D E Q T T Y V F D N K I Q G D L A G R A E I L G K T S L K I W N V T R R S A L Y 113

QY 108 R C E V S A P S E Q Q N L E E D T V T L E V L V A P V P S C E V P S S A L S G T V V E L R C O D K E G N P A P E Y T 167
Db 114 R C E V V A R N D R - K E I D E I V I E L T V Q V K P T P V C R V P K A V P V G K M A T L H C Q E S E G H P R P H Y S 172

QY 168 W F K D G I R L L E N P R L G S Q T N S S Y T W N T K T G T L Q F N T V S K L D T G E Y S C E A R N S V G Y R R C P G 227
Db 173 W Y R N D V L P T D S R A N P R F R N S F H L N S E T G T L V F A V H K D S G Q Y Y C I A S N D A G A R C E E 232

QY 228 K M Q V D D L N I S G I I A A V V V A L V I S V C G L G V C Y A O R K G Y F - - S K E - - T S F Q - - - K S N S S 280
Db 233 Q E M E Y D L N I G G I I G G V L V L A V L I T I G C C A Y R R G Y F I N N K Q D G S Y K P K P D G V N 292

QY 281 K A T T M S E N D F K H T K S F I I 298
Db 293 Y I R T D E G D F R H K S S F V I 310

RESULT 9
Q9BWL8 PRELIMINARY; PRT; 355 AA.
AC Q9BWL8;
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Junction adhesion molecule 3.
GN JAM3.
OS Homo sapiens (Human).

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OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Hearn T.;
RN Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
RL [2]
RP SEQUENCE FROM N.A.
RA Phillips H.M.;
RN "Narrowing the critical region within 11q24-qter for hypoplastic left
RT heart and identification of a candidate gene, JAM3, expressed during
RT cardiogenesis.";
RL Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ16101; CAC94776.1; -.
DR GenBank; HGNC:15532; JAM3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; IgC2; 1.
DR PROSITE; PS00835; IG_LIKE; 2.
DR Immunoglobulin domain.
KW CHAIN 76 355 JUNCTION ADHESION MOLECULE 3.
FT CHAIN 355 AA; 39602 MW; 8B1577DEA7B1D4F8 CRC64;
SQ SEQUENCE 355 AA; 39602 MW; 8B1577DEA7B1D4F8 CRC64;

Query Match 31.6%; Score 481; DB 4; Length 355;
Best Local Similarity 35.8%; Pred. No. 3e-36;
Matches 114; Conservative 60; Mismatches 116; Indels 28; Gaps 10;

QY 1 MARRSRRL-----LILLRLYLVALGYHKAYGFSAPKQQVVTAVXYQEAAILAC 50
DB 46 MALRRPRLRLCARLPDPFLLLLFRGCLG-----AVNLKSSNRTPVQ--EFSEVLS 98
QY 51 -KTPKKTXXSRLEWKXK-LGRSVFVYQOTLQSGDFKNRAEMI-DFNIRIKNVTSDAGKY 107
DB 99 IITDSQTSDPRIEWKIQDEQTTVVFNDKIQGLAGRAEILGKTSLKINVTFRDSALY 158
QY 108 RCEVSAPSEQONLEEDTVTLVLVAVPSCVPSALSGTVVVELRCQKGNPAPEYTT 167
DB 159 RCEVVARNDR-KEIDEIVIELTVQVKPVPVCRVPAVPVGVKMATLRCQSEGHPRPHYS 217
QY 168 WFKDGIKLLNPRLGSQSTNSSTNTKGTTLQNTVSKLDTGYSCEARNVGYRCPCG 227
DB 218 WYRNDVPLPTDSRANPRNSHINSETGLTFTAVHKDDSGYYCIAINDAGSARCEE 277
QY 228 KRNQVDDNLNTSGIIAAVVVALVISVGLGVCAQRKGYF--SKE--TSFQ---KSNSSS 280
DB 278 QEMEVDNLNTGGIIGGLVVLVAVLALITLIGCCAYRRGYFINNKQDGSYKPKPGVNV 337
QY 281 KATTMSNDPKHKKSFII 298
DB 338 YIRTEGDFRHKSSFVI 355

RESULT 10
Q96FL1 PRELIMINARY; PRT; 309 AA.
AC Q96FL1;
DT 01-DEC-2001 (TrEMBLrel. 19, Created)
DT 01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Hypothetical protein (Fragment).
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Strausberg R.;
RN Submitted (JUL-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL; BC010690; AAH10690.1; -.

QY InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00408; IgC2; 1.
DR PROSITE; PS00835; IG_LIKE; 2.
KW Hypothetical protein; Immunoglobulin domain.
FT NON TER 1
SQ SEQUENCE 309 AA; 34917 MW; 50C5B1B7872E8DF3 CRC64;

Query Match 31.6%; Score 480; DB 4; Length 309;
Best Local Similarity 36.5%; Pred. No. 3.1e-36;
Matches 109; Conservative 60; Mismatches 112; Indels 18; Gaps 9;

QY 10 LLLRLYLVALGYHKAYGFSAPKQQVVTAVXYQEAAILAC-KTPKKTXXSRLEWKXK-L-G 67
DB 19 LLLLRGCLIG-----AVNLKSSNRTPVQ--EFSEVLSIIITDSQTSOPRIEWKIQD 71
QY 68 RSVSFVYQOTLQSGDFKNRAEMI-DFNIRIKNVTSDAGKYRCVPSAPSEQONLEEDTV 126
DB 72 EQTTYVFFDNKIQGLAGRAEILGKTSLKINVTFRDSALYRCVAVARNDR-KEIDEIVI 130
QY 127 TLEVLVAVPSCVPSALSGTVVVELRCQKGNPAPEYTTWPKDGIKLLNPRLGSQST 186
DB 131 ELTVRVKPTVPVCRVPAVPVGVKMATLRCQSEGHPRPHYSWYRNDVPLPTDSRANPRFR 190
QY 187 NSSYTNNTKGTTLQNTVSKLDTGYSCEARNVGYRCPCRMQVDDNLNTSGIIAAVVV 246
DB 191 NSSFHLNSETGLTFTAVHKDDSGYYCIAINDAGSARCEEQEMEVDNLNTGGIIGGLV 250
QY 247 VALVISVGLGVCAQRKGYF--SKE--TSFQ---KSNSSKATMTSENDFPKHKKSFII 298
DB 251 VLAVLALITLIGCCAYRRGYFINNKQDGSYKPKPGVNVYIRTEGDFRHKSSFVI 309

RESULT 11
Q8VC39 PRELIMINARY; PRT; 300 AA.
AC Q8VC39;
DT 01-MAR-2002 (TrEMBLrel. 20, Created)
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Hypothetical protein (function cell adhesion molecule1).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Breast tumor;
RA Strausberg R.;
RL Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Cecum;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs.";
RL Nature 420:563-573(2002).
DR EMBL; BC021876; AAH21876.1; -.
DR EMBL; AK033574; BAC28369.1; -.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_V.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG_LIKE; 2.
KW Hypothetical protein.
SQ SEQUENCE 300 AA; 32423 MW; 3CB561E8FF3B97EC CRC64;

Query Match 27.7%; Score 421; DB 11; Length 300;
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Best Local Similarity 34.6%; Pred. No. 8.9e-31;
Matches 104; Conservative 55; Mismatches 130; Indels 12; Gaps 6;

QY 4 RSRHLLLLLLLYLVALGYHAYGFSAPKQOQVTVAXYQAILACKTPKTKVXSRLEW 63
DB 6 KAGRKLFLFTSMILGSLVQGGSGVYTAQSDVQVPE---NESIKLTCTYSGFSFPRVEW 61
QY 64 KKL-GRSVSVFVYQOTLQDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEOGQNL 122
DB 62 KFGVQSTTALVCYNSQITAPADRVTFSSSGITFSSVTRKONGEYTCMV--EEGGQYNG 119
QY 123 EDTVTVLEVLVAPVSCVPSALSGLTVVLRCDKQKNPAPEYTFWFKDGIRLLNPRLG 182
DB 120 EVSIHLTVLVPSPKPTISVPSSVTIGNRAVLTCSEHDGSPPEYSEWFKDGSMLTADAKK 179
QY 183 SOS-TNSSYTWNTKGTLOFNTVSKLDTGEYSCARNVSG-YRRCPGKRMQVDDLNISGI 240
DB 180 TRAFNNSFTIDPKSGDILFDVTAQSDGEYVQAGNGYGTAMRSEAAHMDAVELNVGGI 239
QY 241 IAAVVVVVALVISVCGLVGYAQRKGYF---SKETSFOKSNSSSKATTMSENDFKHTKGF 297
DB 240 VAAVLVTLILGLLFGVWFAYSRGYFERTKGTAPGKKVIYQSPSTRSEGEFKQTSF 299
QY 298 I 298
DB 300 V 300

RESULT 12
QJ9JHV1 PRELIMINARY; PRT; 300 AA.
AC Q9JHY1;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule JAM.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Sprague Dawley;
RA Mashima H., Kojima I.;
RL Submitted (JUN-2000) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF276998; AAF78250.1;
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00047; IG_2.
DR SMART; SM00406; IGv. 1.
DR PROSITE; PS50835; IG LIKE; 2.
SQ SEQUENCE 300 AA; 32369 MW; 45AE362A96158BFA CRC64;

Query Match 26.9%; Score 409.5; DB 11; Length 300;
Best Local Similarity 34.3%; Pred. No. 1e-29;
Matches 95; Conservative 49; Mismatches 98; Indels 35; Gaps 6;

QY 28 GFSAKPKQOVTVAXYQAILACKTPKTKVXSRLEWKKL-GRSVSVFYQOTLQDFKNR 86
DB 53 GFSSP-----RVEWKFVQGSTTALVCYNNQITVPYADR 85
QY 87 AEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEOGQNLDTVTVLEVLVAPVSCVPSAL 146
DB 86 VTFSSSGITFSSVTRKONGEYTCMV--EDGGQNGEVSHTLVLPSPKPTVSIPISSVT 143
QY 147 SGTVVELRCQKQKNPAPEYTFWFKDGIRLLNPRLGSSQ-TNSSYTWNTKGTLOFNTVS 205
DB 144 IGNRAVLTCSEHDGSPPEYSEWFKDGVPMPLTADAKKTRAFINSSYTTIDPKSGDLVFPV 203
QY 206 KLDTGEYSCARNVSG-YRRCPGKRMQVDDLNISGIITAAVVVALVTSVCGLVGYAQRK 264
DB 205 KLDTGEYSCARNVSG-YRRCPGKRMQVDDLNISGIITAAVVVALVTSVCGLVGYAQRK 264

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DB 204 AFDGSEYCEAQNQYGTAMRSEAVRMEAVELNVGGIIVAAVLVTLILGLLIFGIWFAYSR 263
QY 265 GYF---SKETSFOKSNSSSKATTMSENDPKTKTSFII 298
DB 264 GYFERTKGTAPGKKVIYQSPARSEGEFKQTSFVLV 300

RESULT 13
Q9Y5B2 PRELIMINARY; PRT; 259 AA.
AC Q9Y5B2;
DT 01-NOV-1999 (TrEMBLrel. 12, Created)
DT 01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Junction adhesion molecule.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Liu Y., Nusrat A., Schnell F.J., Walsh S., Reaves T.A., Pochet M.,
RA Foley C., Parkos C.A.;
RT "Human junctional adhesion molecule is expressed by polarized columnar
RT epithelia and regulates tight junction resealing.";
RL Submitted (MAY-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF154005; AAD43794.1;
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_C2.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00047; IG_2.
DR SMART; SM00408; IGc2; 1.
DR PROSITE; PS50835; IG LIKE; 1.
KW Immunoglobulin domain.
SQ SEQUENCE 259 AA; 28122 MW; FE38521A911582D0 CRC64;

Query Match 25.9%; Score 193.5; DB 4; Length 259;
Best Local Similarity 36.9%; Pred. No. 2.6e-28;
Matches 87; Conservative 41; Mismatches 97; Indels 11; Gaps 4;

QY 69 SVSFVYQOTLQDFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEOGQNLDTVTL 128
DB 29 SCAYSGFSSPRAASVEDRVTFELPTGITFKSVTRDTGTYTCVVF--EEGNGSYGEVKVL 86
QY 129 EVLVAPVSCVPSALSGLTVVLRCDKQKNPAPEYTFWFKDGIRLLNPRLGSSQSTNS 188
DB 87 IVLVPPSKPTVNIPISSATIGNRAVLTCSEODGSPPEYTFWFKDGIWMPNPKSTRAFS 146
QY 189 SYTWNTKGTLOFNTVSKLDTGEYSCARNVSGYRRCPGK-RMQVDDLNISGIITAAVVVV 247
DB 147 SYLVNPTTIGELVDFPLSASDTGEYSCARNVSGYTPMTSNVNRMEAVRNVGVIAAVALV 206
QY 248 ALVISVCGLVGYAQRKGYFSEKTSFOKSNSSSKA-----TTMSENDPKTKTSFII 298
DB 207 LILGLILVFGIWFAYSRGHEDRT---KGTSSKKVIYQSPARSEGEFKQTSFVLV 259

RESULT 14
Q9JKD5 PRELIMINARY; PRT; 173 AA.
AC Q9JKD5;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule (Fragment).
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RA Kirsch T., Wellner M., Haller H., Lippoldt A.;
RT "Cloning of the rat junctional adhesion molecule (JAM).";

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RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.

DR EMBL; AF241261; AAF61729.1; -;
 DR InterPro; IPR007110; IG-like.
 DR InterPro; IPR003598; IG_C2.
 DR InterPro; IPR003006; IG_MHC.
 DR Pfam; PF00047; ig; 1.
 DR SMART; SM00408; IGC2; 1.
 DR PROSITE; PS0835; IG_LIKE; 1.
 KW Immunoglobulin domain.
 FT NON TER 1
 SQ SEQUENCE 173 AA; 18706 MW; 3EE3ECDFA5AFB8B2 CRC64;

Query Match 20.7%; Score 315.5; DB 11; Length 173;
 Best Local Similarity 38.7%; Pred. No. 2.6e-21;
 Matches 67; Conservative 36; Mismatches 65; Indels 5; Gaps 3;
 QY 131 LVAPAVPCEVPSSALSGTWELRCODEKGNPAPEYTFKDGIRLLENPLRGSQS-TNSS 189
 DB 1 LVPPSKPTVISISSVTIGNRAVLTCSEHGGSPSEYFNKDGVPMLTADAKTRAFINSS 60
 QY 190 YTMNTKTGTLQNTVSKLDTGEYSCEARNVSG-YRRCPGKRMQVDDLNI SGIIAAVVVA 248
 DB 61 YTIIDPKSGDLVDPVSAFDSGEYCEAQNGYGTAMRSEAVRMEAVELNVGGIVAAVLVTL 120
 QY 249 LVISVCGLGVCYQARKGYE---SKETSFOKSNSSSKATMTSENDFKTKSPFI 298
 DB 121 ILLGLLIIFGIWFAYSGYFERTKGTAPGKVIYQPSARSSEGEFKTSSFLV 173

RESULT 15
 Q91664
 ID Q91664 PRELIMINARY; PRT; 318 AA.
 AC Q91664;
 DT 01-NOV-1996 (TRENBLrel. 01, Created)
 DT 01-NOV-1996 (TRENBLrel. 01, Last sequence update)
 DT 01-MAR-2003 (TRENBLrel. 23, Last annotation update)
 DE CTX.
 OS Xenopus laevis (African clawed frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidae; Pipidae;
 OC Xenopodinae; Xenopus.
 OX NCBI_TaxID=8355;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=ff; TISSUE=Thymus;
 RX MEDLINE=96210130; PubMed=8625968;
 RA Chretien I., Robert J., Marcuz A., Garcia-Sanz J.A., Courtet M.,
 RA Du Pasquier L.;
 RT "CTX, a novel molecule specifically expressed on the surface of
 RT cortical thymocytes in Xenopus";
 RL Eur. J. Immunol. 26:780-791(1996).
 DR EMBL; U43330; AAC59899.1; -;
 DR InterPro; IPR003599; IG.
 DR InterPro; IPR07110; IG-like.
 DR InterPro; IPR003006; IG_MHC.
 DR Pfam; PF00047; ig; 2.
 DR SMART; SM00409; IG; 2.
 DR PROSITE; PS0835; IG_LIKE; 2.
 SQ SEQUENCE 318 AA; 34429 MW; 6231D24B0B806C09 CRC64;

Query Match 14.9%; Score 227; DB 13; Length 318;
 Best Local Similarity 29.1%; Pred. No. 9.6e-13;
 Matches 77; Conservative 39; Mismatches 107; Indels 42; Gaps 14;
 QY 9 LLLLLLYLVVALGYHKAYGSAFKQQQVTVAVYQYAILAC-----KTPKKTVXSRLW 63
 DB 4 LLFITLGLSLTALSHCVQVTIQNP----IINVTSGQNTALCYTVILNNQKNLV--IQW 57
 QY 64 -----KKLGRSVSVFYQ-QTLOG-DFKNR--AEMIDFN--IRIKNVTSDAGKYRCEV- 111
 DB 58 NIFQAKSQNETVFFYQNGSLGSPYKKNRVTAAMSPGNATITISNMQSDTGIYTCVL 117
 QY 112 SAPSEQQNLEEDTVTILEVLVAPAVPCEVPSSALSGTWELRCQDKGNPAPEYTFWKD 171

Search completed: December 9, 2003, 17:13:00
 Job time : 35.1882 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:26:03 ; Search time 44.6481 Seconds
(without alignments)
1059.408 Million cell updates/sec

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Perfect score: 298

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Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1107863 seqs, 158726573 residues

Word size : 30

Total number of hits satisfying chosen parameters: 40

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	296	99.3	298	19 AAW75220	Human secreted pro
2	296	99.3	298	23 AAE26983	Human gene 25 enco
3	296	99.3	298	23 AAE27121	Human gene 25 enco
4	296	99.3	298	24 ABR47926	Human secreted pro
5	296	99.3	298	24 ABR44994	Human secreted pro
6	296	99.3	298	24 ABR00172	Human gene 162 enc
7	240	80.5	298	19 AAW85457	Secreted protein e
8	240	80.5	298	22 AAU00512	Human junctional a
9	240	80.5	298	23 ABP61801	Human polypeptide

10	240	80.5	298	24	AAO16452	Human junctional a
11	230	77.2	312	20	AAO08060	Human PRO245 prote
12	230	77.2	312	20	AAO23324	A33 related antige
13	230	77.2	312	20	AAO13354	Amino acid sequenc
14	230	77.2	312	21	AAO33421	Human PRO245 prote
15	230	77.2	312	21	AAO24401	Human PRO245 prote
16	230	77.2	312	21	AAO70668	Human PRO245 prote
17	230	77.2	312	22	AAU12339	Human PRO245 polyp
18	230	77.2	312	22	AAU00821	Human immune respo
19	230	77.2	312	22	AAO80322	Human PRO245 prote
20	230	77.2	312	22	AAO50904	Human PRO245 prote
21	230	77.2	312	22	AAO53081	Human angiogenesis
22	230	77.2	312	24	ABU69632	Novel human secret
23	230	77.2	312	24	ABU71455	Human PRO polypept
24	230	77.2	312	24	ABU71901	Human secreted/tra
25	230	77.2	312	24	ABU07738	Human A-33 related
26	230	77.2	312	24	ABU66737	Human PRO polypept
27	230	77.2	312	24	ABU67013	Human secreted/tra
28	230	77.2	312	24	ABU67355	Human secreted pro
29	230	77.2	312	24	ABU59818	Novel secreted and
30	230	77.2	312	24	ABU64509	Human secreted/tra
31	230	77.2	312	24	ABU54357	Human secreted/tra
32	222	74.5	222	22	AAW41947	Human polypeptide
33	215	72.1	215	22	AAO70500	Angiogenesis prote
34	183	61.4	213	21	AAO27277	Human confluency r
35	166	55.7	303	22	AAO23693	Human EST encoded
36	107	35.9	107	22	AAO40161	Human polypeptide
37	89	29.9	388	22	ABG22341	Novel human diagno
38	73	24.5	140	22	ABG22338	Novel human diagno
39	69	23.2	69	22	ABG22339	Novel human diagno
40	51	17.1	66	22	ABG22340	Novel human diagno

ALIGNMENTS

RESULT 1
AAW75220
ID AAW75220 standard; Protein; 298 AA.
AC AAW75220;
DT 29-JAN-1999 (first entry)
Human secreted protein encoded by gene 25 clone HTSEB42.

Human; secreted protein; fusion protein; gene therapy; protein therapy;
diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
developmental abnormality; foetal deficiency; blood; allergy; renal;
immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.

Homo sapiens.

Key Location/Qualifiers
FT Misc-difference 42
FT Misc-difference 42 /label= unknown
FT Misc-difference 58
FT Misc-difference 58 /label= unknown

PN WO98040483-A2.
XX
XX
PD 17-SEP-1998.
XX
XX
PF 12-MAR-1998; 98WO-US04858.
XX
XX
PR 19-DEC-1997; 97US-0068368.
PR 14-MAR-1997; 97US-0040710.
PR 14-MAR-1997; 97US-0040762.
PR 30-MAY-1997; 97US-0048100.

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PR 30-MAY-1997; 97US-0048189.
PR 30-MAY-1997; 97US-0048357.
PR 30-MAY-1997; 97US-0050934.
PR 06-JUN-1997; 97US-0048970.
PR 05-SEP-1997; 97US-0057765.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;
XX Li H, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR,
XX Wei YF, Young PE, Zeng Z;
XX WPI; 1998-520811/44.
XX N-PSDB; AAV34310.
XX
XX Isolated human poly:nucleotide(s) encoding secretory peptide(s) -
XX used to develop products for the diagnosis and treatment of e.g.
XX inflammation, cancers, CNS disorders or immune system disorders
XX
XX Claim 1; Page 168-169; 20ipp; English.
XX
XX This sequence represents a secreted human protein encoded by the gene
XX clone detailed in the descriptor line. The gene can be used to generate
XX fusion proteins by linking to the gene to a human immunoglobulin Fc
XX portion (e.g. AAV34277) for increasing the stability of the fused
XX protein as compared to the human protein only.
XX The invention relates to 28 novel genes and their fragments (nucleic
XX acid sequences: AAV34286-V34325; amino acid sequences AAW75196-W75235)
XX which are useful for preventing, treating or ameliorating medical
XX conditions e.g. by protein or gene therapy. Also, pathological
XX conditions can be diagnosed by determining the amount of the new
XX polypeptides in a sample or by determining the presence of mutations in
XX the new polynucleotides. Specific uses are described for each of the 28
XX polynucleotides, based on which tissues they are most highly expressed in
XX (see AAV34286 for described uses).
XX
XX Sequence 298 AA;
XX
XX Query Match 99.3%; Score 296; DB 19; Length 298;
XX Best Local Similarity 100.0%; Pred. No. 2.5e-273;
XX Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 MARRSRRLRLLLRLYLVALGYHKAYGFSAPKDDQVVTAVYQEAIALACKTPKTVXSR 60
XX |
XX Db 1 MARRSRRLRLLLRLYLVALGYHKAYGFSAPKDDQVVTAVYQEAIALACKTPKTVXSR 60
XX |
XX QY 61 LEWKLGRSVSFVYQOTLQGDFFKRAEMIDFNIRIKNVTSDAGKYRCVSPAPSEQQQN 120
XX |
XX Db 61 LEWKLGRSVSFVYQOTLQGDFFKRAEMIDFNIRIKNVTSDAGKYRCVSPAPSEQQQN 120
XX |
XX QY 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVLRCDKEGNPAPEYTWFKDGLRLLENPR 180
XX |
XX Db 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVLRCDKEGNPAPEYTWFKDGLRLLENPR 180
XX |
XX QY 181 LGSQSTNSSTYMTTKTGLTFNTVSKLDTGEYSCAARNVGVYRCPCGRMQVDLNLISGI 240
XX |
XX Db 181 LGSQSTNSSTYMTTKTGLTFNTVSKLDTGEYSCAARNVGVYRCPCGRMQVDLNLISGI 240
XX |
XX QY 241 IAAVVVVVALVISVGLGVCAQRKGYSKETSFKQKNSSSKATMSGENDFKTKSFII 298
XX |
XX Db 241 IAAVVVVVALVISVGLGVCAQRKGYSKETSFKQKNSSSKATMSGENDFKTKSFII 298
XX |
XX
XX RESULT 2
XX ID AAE26983
XX AA AAE26983 standard; Protein; 298 AA.
XX
XX AC AAE26983;
XX
XX DT 13-DEC-2002 (first entry)
XX
XX DE Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
XX

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KW Human; immunodeficiency; X-linked agammaglobulinaemia; septic shock;
KW autoimmune disorder; rheumatoid arthritis; multiple sclerosis; cancer;
KW Grave's disease; diabetes mellitus; haematopoietic disorder; stroke;
KW respiratory disorder; asthma; allergy; gastrointestinal disorder;
KW inflammatory bowel disease; neurodegenerative disorder; hepatitis;
KW Parkinson's disease; Alzheimer's disease; cardiovascular disorder;
KW atherosclerosis; myocarditis; renal disorder; fungicide; virucide;
KW hyperproliferative disorder; acute glomerulonephritis; tonsillitis;
KW respiratory disorder; rhinitis; sinusitis; neurological disease;
KW endocrine disorder; Addison's disease; reproductive system disorder;
KW endometriosis; vasotropic; vulnary; cytostatic; nootropic; cardiant;
KW anti-HIV; tranquilliser; gout; antiparasitic.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Peptide 1..22 /label= Signal_peptide
XX Protein 23..298
XX Misc-difference 42 /label= Unknown
XX /note= "Human mature secreted protein"
XX
XX Misc-difference 58 /label= Unknown
XX /note= "Encoded by TSC"
XX
XX US2002077287-A1.
XX
XX 20-JUN-2002.
XX
XX 11-MAY-2001; 2001US-0852659.
XX
XX 11-SEP-1998; 98US-0152060.
XX
XX (RUBE/) RUBEN S M.
XX (ROSE/) ROSEN C A.
XX (LIYV/) LI Y.
XX (ZENG/) ZENG Z.
XX (KYAW/) KYAW H.
XX (FISC/) FISCHER C L.
XX (LIHH/) LI H.
XX (SOPP/) SOPPET D R.
XX (GENT/) GENTZ R L.
XX (WEIY/) WEI Y.
XX
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
XX Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
XX Ferrie AM;
XX WPI; 2002-598780/64.
XX N-PSDB; AAD44660.
XX
XX Novel human secreted polypeptides and polynucleotides for diagnosing,
XX preventing, treating immune, hyperproliferative, cardiovascular,
XX neurological, reproductive disorders and identifying modulators of
XX therapeutic use
XX
XX Claim 11; Page 186; 209pp; English.
XX
XX AAD44636-AAD44676 represent cDNAs corresponding to 28 human secreted
XX protein genes, and AAE26959-AAE26999 represent the proteins they encode.
XX AAE27000-AAE27025 represent human secreted protein fragments or their
XX variants. The secreted proteins and genes are useful for preventing,
XX treating or ameliorating medical conditions, e.g., by protein or gene
XX therapy. Specific uses are described for each of the 28 genes, based
XX on the tissues in which they are most highly expressed and include
XX developing products for the diagnosis or treatment of immunodeficiencies,
XX e.g., X-linked agammaglobulinaemia, B cell immunodeficiencies, severe
XX combined immunodeficiencies, autoimmune disorders e.g., systemic lupus
XX erythematosus, rheumatoid arthritis, multiple sclerosis, autoimmune
XX thyroiditis, autoimmune haemolytic anaemia, Goodpasture's syndrome,
XX Grave's disease, diabetes mellitus, dermatitis, inflammatory conditions
XX

```

CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
CC disease, Crohn's disease, hematopoietic disorders, respiratory
CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,
CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
CC ischemic brain injury and/or stroke, neurodegenerative disorders e.g.,
CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
CC prion disease, cardiovascular disorders e.g., myocarditis, arrhythmias,
CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
CC related disorder (thrombosis), arterial thrombosis, atherosclerosis,
CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
CC renal disorders, e.g. acute glomerulonephritis, neurological diseases,
CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
CC disease, hyperpituitarism, infectious diseases and reproductive system
CC disorders e.g. endometriosis. The present sequence represents a human
CC secreted protein of the invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 296; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQQVTVAVYQEAAILACKTPKTVKSR 60
DB 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQQVTVAVYQEAAILACKTPKTVKSR 60

QY 61 LEWKKLGRSVFVYYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGN 120
DB 61 LEWKKLGRSVFVYYQOTLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGN 120

QY 121 LEEDTVTLVAPVPSCEVSSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPR 180
DB 121 LEEDTVTLVAPVPSCEVSSALSGTVVELRCQDKEGNPAPEYTFWKGIRLLENPR 180

QY 181 LGSQSTNSSTYTNMTKTGLQFNTVSKLDGYSCEARNVGVYRCRQKMQVDDNLISGI 240
DB 181 LGSQSTNSSTYTNMTKTGLQFNTVSKLDGYSCEARNVGVYRCRQKMQVDDNLISGI 240

QY 241 IAAVVVALVISVGLGVCYAKRGYFYSKETSFKQKSNSSSKATTMSNDFKHTKSPFI 298
DB 241 IAAVVVALVISVGLGVCYAKRGYFYSKETSFKQKSNSSSKATTMSNDFKHTKSPFI 298

RESULT 3
AAE27121
ID AAE27121 standard; Protein; 298 AA.
AC AAE27121;
DT 13-DEC-2002 (first entry)
DE Human gene 25 encoded secreted protein HTEB42, SEQ ID NO:76.
XX Human; secreted protein; autoimmune disease; hyperproliferative disorder;
KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
KW cerebral ischemia; cardiovascular disorder; nervous system disorder;
KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
KW infection; corneal infection; skin aging; food additive; preservative;
KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
KW cardiant; vasotropic; cerebroprotective; neurotropic; neuroprotective;
KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
vulnerable.

XX Homo sapiens.
OS
XX
FH Key Location/Qualifiers
FT Peptide 1..22
FT /label= Signal_peptide
FT 23..298
FT /note= "Mature human secreted protein"

FT Misc-difference 42 /label= Unknown
FT /note= "Encoded by GWG"
FT Misc-difference 58 /label= Unknown
FT /note= "Encoded by TSC"
XX US2002076756-A1.
XX 20-JUN-2002.
XX 11-MAY-2001; 2001US-0853161.
XX 02-FEB-2001; 2001US-265583P.
XX (RUBE/) RUBEN S M.
XX (ROSE/) ROSEN C A.
XX (LIYY/) LI Y.
XX (ZENG/) ZENG Z.
XX (KYAW/) KYAW H.
XX (FISC/) FISCHER C L.
XX (LIHH/) LI H.
XX (SOPP/) SOPPET D R.
XX (GENT/) GENTZ R L.
XX (WEIY/) WEI Y.
XX (MOOR/) MOORE P A.
XX (YOUN/) YOUNG P E.
XX (GREE/) GREENE J M.
XX (FERR/) FERRIE A M.
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
XX Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
XX Ferrie AM;
XX WPI; 2002-574454/61.
XX N-PSDB; AAD44878.
XX New nucleic acid molecules encoding 28 human secreted proteins, useful
XX for diagnosing, preventing, treating or ameliorating medical conditions
XX and as food additives or preservatives
XX Claim 11; Page 186-187; 209pp; English.
XX AAD4854-AAD4984 represent cDNAs corresponding to 28 human secreted
XX protein genes, and AAE27097-AAE27137 represent the proteins they encode.
XX AAE27138-AAE27164 represent human secreted protein fragments. The genes
XX and their corresponding secreted proteins are useful for preventing,
XX treating or ameliorating medical conditions, e.g., by protein or gene
XX therapy. Secreted protein sequences of the invention are useful for the
XX diagnosis or treatment of disorders such as autoimmune diseases (e.g.,
XX rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
XX the breast or liver), cerebrovascular disorders (e.g. cerebral ischemia,
XX angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
XX system disorders (e.g. Alzheimer's disease), infections caused by fungi,
XX bacteria and viruses and ocular disorders (e.g. corneal infection). The
XX polypeptides can also be used to aid wound healing and epithelial cell
XX proliferation, to prevent skin aging due to sunburn, to maintain organs
XX before transplantation, for supporting cell culture of primary tissues,
XX to regenerate tissues and in chemotaxis. They can also be used as food
XX additives or preservative to increase or decrease storage capabilities,
XX fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
XX and other nutritional components. The present sequence represents a human
XX secreted protein of the invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 296; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQQVTVAVYQEAAILACKTPKTVKSR 60
DB 1 MARRSRHRLLLRLVVALGYHKAYGFSAPKQQQVTVAVYQEAAILACKTPKTVKSR 60

QY 61 LEWKKLGRSVFVYQOTLQDQKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120
 DB 61 LEWKKLGRSVFVYQOTLQDQKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120
 QY 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVLRCDQKGNPAPEYTFWKGIRLLENPR 180
 DB 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVLRCDQKGNPAPEYTFWKGIRLLENPR 180
 QY 181 LGSOSTNSSTYMTNTKTGTLOFNTVSKLDTGEVSCSEARNVGYRRCPGKRMQVDDLNISGI 240
 DB 181 LGSOSTNSSTYMTNTKTGTLOFNTVSKLDTGEVSCSEARNVGYRRCPGKRMQVDDLNISGI 240
 QY 241 IAAVVVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFI 298
 DB 241 IAAVVVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFI 298

RESULT 4

ABR47926
 ID ABR47926 standard; Protein; 298 AA.

XX ABR47926;

XX 12-JUN-2003 (first entry)

XX Human secreted protein, SEQ ID 817.

XX Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
 KW vulnerary; antiinflammatory; nootropic; neuroprotective;
 KW antiparkinsonian; gene therapy; human; cardiovascular disorder.

XX Homo sapiens.

XX WO200295010-A2.

XX 28-NOV-2002.

XX 19-MAR-2002; 2002WO-US09785.

XX 21-MAR-2001; 2001US-277340P.

PR 19-JUL-2001; 2001US-306171P.

PR 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Rosen CA, Ruben SM;

XX WPI; 2003-129429/12.

XX Novel human secreted proteins, useful for detecting, preventing,

XX diagnosing, prognosticating, treating and/or ameliorating

XX cardiovascular disorders such as arrhythmia -

XX Claim 13; SEQ ID 817; 1881pp; English.

XX The present invention relates to novel human secreted proteins
 CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
 CC proteins and their coding sequences are useful for the preparation of a
 CC diagnostic or pharmaceutical composition for diagnosing or treating a
 CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
 CC coronary arteriosclerosis and myocardial ischaemia), neural disorders,
 CC immune system disorders, muscular disorders, reproductive disorders,
 CC gastrointestinal disorders, pulmonary disorders, renal disorders,
 CC proliferative disorders and/or cancerous diseases and conditions, for
 CC wound healing and epithelial cell proliferation, to treat inflammation or
 CC infection, for treating thrombosis and arteriosclerosis, for treating or
 CC preventing neural damage which occurs in neuronal disorders or
 CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
 CC disease, to enhance bone and periodontal regeneration and aid in tissue
 CC transplants or bone grafts, to prevent skin aging or hair loss, to
 CC stimulate growth and differentiation of haematopoietic cells and bone
 CC marrow cells when used in combination with other cytokines, to maintain

CC organs before transplantation or for supporting cell culture of primary
 CC tissue, to increase or decrease differentiation or proliferation of
 CC embryonic stem cells, or to modulate mammalian characteristics or
 CC metabolism.

CC Note: The sequence data for this patent was published in electronic
 CC format and is available from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 298 AA;

QY Query Match 99.3%; Score 296; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. NO. 2.5e-273;
 Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRRLRLRLRLRLRYLVVALGYHKAYGFSAPKDDQVVTAVXYQEAILACKTPKKTVXSR 60

DB 1 MARRSRRLRLRLRLRLRYLVVALGYHKAYGFSAPKDDQVVTAVXYQEAILACKTPKKTVXSR 60

QY 61 LEWKKLGRSVFVYQOTLQDQKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120

DB 61 LEWKKLGRSVFVYQOTLQDQKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQN 120

QY 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVLRCDQKGNPAPEYTFWKGIRLLENPR 180

DB 121 LEEDVTLEVLVAPVPSCEVPSSALSGTVVLRCDQKGNPAPEYTFWKGIRLLENPR 180

QY 181 LGSOSTNSSTYMTNTKTGTLOFNTVSKLDTGEVSCSEARNVGYRRCPGKRMQVDDLNISGI 240

DB 181 LGSOSTNSSTYMTNTKTGTLOFNTVSKLDTGEVSCSEARNVGYRRCPGKRMQVDDLNISGI 240

QY 241 IAAVVVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFI 298

DB 241 IAAVVVVVALVISVCGLVGYCAQRKGYSKETSFKQSNSSSKATTMSENDFKHTKSFI 298

RESULT 5

ABU64994

ID ABU64994 standard; Protein; 298 AA.

XX AC ABU64994;

XX 15-MAY-2003 (first entry)

XX Human secreted protein gene 25, protein.

XX Secreted protein; immunodeficiency; multiple sclerosis;
 KW severe combined immunodeficiency; autoimmune disorder; cancer;
 KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;
 KW inflammatory condition; septic shock; inflammatory bowel disease;
 KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;
 KW gastrointestinal disorder; central nervous system disorder;
 KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;
 KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;
 KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;
 KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;
 KW endocrine disorder; liver disease; reproductive system disorder;
 KW endometriosis; infectious disease; pancreatic disorder; vaccine;
 KW wound repair; angiogenesis; lymphatic disorder; hair loss; body weight;
 KW body height; hair colour; human.

XX Homo sapiens.

XX US2002172994-A1.

XX 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.

XX 14-MAR-1997; 97US-040710P.

PR 14-MAR-1997; 97US-040762P.

PR 30-MAY-1997; 97US-048100P.

PR 30-MAY-1997; 97US-048189P.

PR 30-MAY-1997; 97US-048357P.

PR 30-MAY-1997; 97US-050934P.
 PR 06-JUN-1997; 97US-048970P.
 PR 05-SEP-1997; 97US-057765P.
 PR 13-DEC-1997; 97US-068368P.
 PR 02-FEB-2001; 2001US-265583P.
 PR 12-MAR-1998; 98WO-US04858.
 PR 11-SEP-1998; 98US-0152060.
 XX (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYY/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (FYSC/) FISCHER C L.
 PA (KYAW/) KYAW H.
 PA (LIHH/) LI H.
 PA (SOPP/) SOPPET D R.
 PA (GENTZ/) GENTZ R L.
 PA (WEIR/) WEI Y.
 PA (MOOR/) MOORE P A.
 PA (YOUNG/) YOUNG P E.
 PA (GREE/) GREENE J M.
 PA (FERR/) FERRIE A M.
 XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 PI Ferrie AM;
 XX WPI: 2003-310989/30.
 DR N-PSDB; ABX96990.
 XX
 DR
 DR
 XX
 PT New human secreted polypeptides and polynucleotides for diagnosing,
 PT prognosing, preventing and treating immune, hyperproliferative, liver,
 PT kidney, reproductive disorders and for identifying modulators of
 PT therapeutic use -
 XX
 PS Claim 11; Page 186; 209pp; English.
 XX
 CC The invention relates to an isolated polypeptide comprising an amino acid
 CC sequence at least 95% identical to sequence of 28 human secreted
 CC proteins, their fragment, polypeptide domain, epitope, secreted form,
 CC variant, allelic variant, or species homologue, or the encoded sequence
 CC included in ATCC 97921 and 97922. Also included are the encoding
 CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
 CC The proteins and nucleic acids are useful for diagnosing, preventing,
 CC treating, prognosing or ameliorating a medical condition e.g.
 CC immunodeficiencies (e.g. X-linked agammaglobulinaemia, B cell
 CC disorders (e.g. systemic erythematosis, rheumatoid arthritis, multiple
 CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
 CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
 CC haematopoietic disorders, inflammatory conditions (e.g. septic shock,
 CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
 CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
 CC disorders, cancers (e.g. gastric, ovarian, lung, bladder, liver and
 CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
 CC injury and/or stroke, traumatic brain injury), neurodegenerative
 CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
 CC dementia, and prion disease), cardiovascular disorders (e.g.
 CC atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
 CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
 CC pancreatitis, sarcoidosis, dermatitis, allogenic transplant rejection),
 CC blood-related disorders (thrombosis, arterial thrombosis),
 CC hyperproliferative disorders, renal disorders (e.g. acute
 CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
 CC hyperthyroidism, hypoparathyroidism), liver diseases and disorders,
 CC reproductive system disorders (e.g. endometriosis), infectious diseases,
 CC and pancreatic disorders. Many other diseases and disorders are listed in
 CC the specification. They also useful as a vaccine adjuvant. Further they
 CC are useful to enhance or inhibit complement mediated cell lysis, for
 CC stimulating wound and tissue repair, angiogenesis, and the repair of
 CC vascular or lymphatic diseases or disorders. They are also useful
 CC to prevent hair loss, to modulate mammalian characteristics such as body
 CC height, weight, hair colour, and to increase or decrease storage

CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
 CC minerals, cofactors or other nutritional components. The proteins are
 CC also useful for identifying binding partners. The present sequence
 CC represents a secreted protein of the invention.
 XX
 SQ Sequence 298 AA;
 Query Match 99.3%; Score 296; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 2.5e-273; Indels 0; Gaps 0;
 Matches 298; Conservative 0; Mismatches 0;
 QY 1 MARRSRHRLLLRLVWALGYHKAYGFSAPKDDQVVTAVYQEAIALACKTKPKTVKSR 60
 DB 1 MARRSRHRLLLRLVWALGYHKAYGFSAPKDDQVVTAVYQEAIALACKTKPKTVKSR 60
 QY 61 LEWKLGSRVSFVYYQOTLQDFFNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEGCQN 120
 DB 61 LEWKLGSRVSFVYYQOTLQDFFNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEGCQN 120
 QY 121 LEEDTVTLEVLVAPVAPVPSCEVPSSALSGTVVLELRCDKGNPAPEYTFWFKDGLRLLENPR 180
 DB 121 LEEDTVTLEVLVAPVAPVPSCEVPSSALSGTVVLELRCDKGNPAPEYTFWFKDGLRLLENPR 180
 QY 181 LGSQSTNSSYTMNTKTGTQFNTVSKLDTGEYSCARNVGYRRCPCGRMQVDDNLISGI 240
 DB 181 LGSQSTNSSYTMNTKTGTQFNTVSKLDTGEYSCARNVGYRRCPCGRMQVDDNLISGI 240
 QY 241 IAAVVVVVALVISVGLGVCYVAQRKGYFSKETSFKNSNSSKATMTSENDFPKHTKSFII 298
 DB 241 IAAVVVVVALVISVGLGVCYVAQRKGYFSKETSFKNSNSSKATMTSENDFPKHTKSFII 298
 RESULT 6
 ABR00172
 ID ABR00172 standard; Protein; 298 AA.
 XX
 AC ABR00172;
 DT 03-APR-2003 (first entry)
 XX
 DE Human gene 162 encoded secreted protein HTEB42, SEQ ID NO:461.
 XX
 KW Human; secreted protein; digestive disorder; gastrointestinal disorder;
 KW mouth; oesophagus; stomach; small intestine; large intestine; liver;
 KW biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
 KW immune disorder; inflammation; infection; wound healing; drug screening;
 KW chromosome identification; chromosome mapping; cytostatic; gene therapy;
 KW antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.
 XX
 OS Homo sapiens.
 XX
 PN WO200276488-A1.
 XX
 PD 03-OCT-2002.
 XX
 PF 19-MAR-2002; 2002WO-US08276.
 XX
 PR 21-MAR-2001; 2001US-277340P.
 PR 19-JUL-2001; 2001US-306171P.
 PR 13-NOV-2001; 2001US-331287P.
 XX (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Rosen CA, Ruben SM;
 DR WPI: 2003-029900/02.
 DR N-PSDB; AB271351.
 XX
 PT New human secreted proteins and nucleic acids, useful for detecting,
 PT preventing, diagnosing, prognosticating, treating and/or ameliorating
 PT e.g. gastrointestinal diseases and disorders, or cancers -
 XX
 PS Claim 13; Page 1046-1047; 1216pp; English.

XX AB2711190-AB271478 represent cDNAs corresponding to 178 human secreted
CC protein genes, and ABP00011-ABP00299 represent the proteins they encode.
CC AB271479-AB271540 represent human secreted protein genomic fragments. The
CC invention also encompasses antibodies specific for the secreted proteins,
CC the use of the secreted proteins in drug screening, and recombinant
CC vectors and host cells comprising a nucleic acid of the invention. The
CC secreted proteins, nucleic acids encoding them, antibodies or antibody
CC fragments specific for the secreted proteins, and modulators of protein
CC activity are useful for diagnosing, treating, ameliorating or preventing
CC digestive disorders. Such conditions include disorders of the mouth,
CC oesophagus, stomach, small intestine, large intestine, liver, biliary
CC tract and pancreas, and include cancers of these organs and tissues. The
CC secreted proteins and their nucleic acids may also be used in the
CC treatment of immune disorders, inflammation, infection,
CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
CC of the invention may be used for chromosome identification, chromosome
CC mapping, in gene therapy, for identifying individuals from minute
CC biological samples, as hybridisation probes, and as molecular weight
CC markers. The present sequence represents a human secreted protein of the
CC invention.
XX SQ Sequence 298 AA;
Query Match 99.3%; Score 296; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MARRSRHLLLLRLYLVALGYHKAFCGAPKQOOVTVAVYQEAIIACKTPKTVKSR 60
Db 1 MARRSRHLLLLRLYLVALGYHKAFCGAPKQOOVTVAVYQEAIIACKTPKTVKSR 60
Qy 61 LEWKKLGRSVFVYQOTLQDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQN 120
Db 61 LEWKKLGRSVFVYQOTLQDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQN 120
Qy 121 LEEDTVTLEVLVAPVSPCEVPSSALSGTVVELRCQDKEGPAPEYTFWKGIRLLENPR 180
Db 121 LEEDTVTLEVLVAPVSPCEVPSSALSGTVVELRCQDKEGPAPEYTFWKGIRLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGLQFNVTSKLDTGYSCEARNVSVYRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSYTMNTKTGLQFNVTSKLDTGYSCEARNVSVYRCPGKRMQVDDLNISGI 240
Qy 241 IAAVVVVALVISVCGLVGYCAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298
Db 241 IAAVVVVALVISVCGLVGYCAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298

RESULT 7
AAW85457
XX ID AAW85457 standard; Protein; 298 AA.
XX AC AAW85457;
XX XX
XX XX
XX 25-FEB-1999 (first entry)
XX XX
XX Secreted protein encoded by clone ct864_4.
XX XX
XX Secreted protein; nutritional activity; immune stimulating; vaccine;
XX KW suppressing activity; haematopoiesis regulating activity;
XX KW tissue growth activity; activin; inhibin activity; chemotaxis;
XX KW Chemokinetic activity; haemostasis; thrombolytic activity; receptor;
XX KW ligand; anti-inflammatory; cadherin; tumour invasion suppressor;
XX KW tumour inhibition; gene therapy.
XX XX
XX Homo sapiens.
XX OS
XX XX
XX PN W09842739-A2.
XX XX
XX PD 01-OCT-1998.
XX XX
XX XX 20-MAR-1998; 98WO-US05653.

XX 19-MAR-1998; 98US-0044466.
PR 21-MAR-1997; 97US-0822167.
XX (GEMY) GENETICS INST INC.
XX PA Agostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;
PI Racie LA, Spaulding V, Treacy M;
XX WPI; 1998-609890/51.
DR N-PSDB; AAW82780.
XX New polynucleotides encoding secreted human proteins - derived from
PT human foetal brain, adult brain, foetal kidney, placenta or adult
PT pineal gland cDNA libraries.
XX Claim 17; Page 73-74; 113pp; English.
XX The present sequence represents a secreted protein. The polynucleotide
CC and secreted protein are predicted to have biological activities which
CC would make them suitable for treating, preventing or ameliorating medical
CC conditions in humans and animals, although no supporting data is given.
CC suggested activities include nutritional activity, immune stimulating
CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
CC activity, tissue growth activity, activin/inhibin activity,
CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
CC invasion suppressor activity, and tumour inhibition activity (no data is
CC given in the specification to support these activities). The
CC polynucleotide is also stated to be useful for gene therapy.
XX SQ Sequence 298 AA;
Query Match 80.5%; Score 240; DB 19; Length 298;
Best Local Similarity 100.0%; Pred. No. 5.2e-220;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 59 SRLBWKKLGRSVFVYQOTLQDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
Db 59 SRLBWKKLGRSVFVYQOTLQDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
Qy 119 QNLBEDTVTLEVLVAPVSPCEVPSSALSGTVVELRCQDKEGPAPEYTFWKGIRLLEN 178
Db 119 QNLBEDTVTLEVLVAPVSPCEVPSSALSGTVVELRCQDKEGPAPEYTFWKGIRLLEN 178
Qy 179 PRGQSQSTNSSYTMNTKTGLQFNVTSKLDTGYSCEARNVSVYRCPGKRMQVDDLNIS 238
Db 179 PRGQSQSTNSSYTMNTKTGLQFNVTSKLDTGYSCEARNVSVYRCPGKRMQVDDLNIS 238
Qy 239 GI1AAVVVVALVISVCGLVGYCAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298
Db 239 GI1AAVVVVALVISVCGLVGYCAQRKGYSFKTSFQKSNSSSKATTMSENDFKHTKSFII 298

RESULT 8
AAU00512
XX ID AAU00512 standard; Protein; 298 AA.
XX AC AAU00512;
XX XX
XX 09-MAY-2001 (first entry)
XX DT
XX XX
XX Human junctional adhesion protein (JAM2).
XX XX
XX Junctional adhesion protein; JAM2; cellular localisation;
XX KW cellular expression; immunoprecipitation; stroke; phosphorylation;
XX KW glycosylation; paracellular migration; inflammatory disease;
XX KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
XX KW Crohn's disease.
XX XX
XX Homo sapiens.
XX OS
XX FH Key Location/Qualifiers

FT Peptide 1...20 /note= "Possible signal peptide #1"
 FT Peptide 1...28 /note= "Possible signal peptide #2"
 FT Protein 21...298 /note= "Possible mature JAM2 #1"
 FT Protein 29...298 /note= "Possible mature JAM2 #2"
 FT Domain 237...254 /note= "Transmembrane domain"
 XX
 FN W0200114404-A1.
 XX
 PD 01-MAR-2001.
 XX
 XX 23-AUG-2000; 2000MO-US23158.
 XX
 PR 24-AUG-1999; 99US-0150459.
 XX
 XX (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 XX
 XX Cunningham S, Trinidad Arrate Barros M;
 XX
 DR WPI; 2001-218425/22.
 DR N-PSDB; AAS00512.
 XX
 XX Novel nucleic acids encoding human junctional adhesion protein useful
 PT for producing antibodies that are suitable for therapeutic purposes -
 XX
 PS Claim 4; Page 46-47; 51pp; English.
 XX
 CC The sequence represents a human junctional adhesion molecule 2 (JAM2).
 CC The polynucleotide encoding the polypeptide is useful for recombinant
 CC production of JAM-2 protein, which in turn is useful for the production
 CC of antibodies. The antibodies may be used for probing cellular
 CC localisation and/or expression of JAM2 in tissues under normal and
 CC disease states, for immunoprecipitating JAM2 protein from cells and/or
 CC stroke tissues to determine whether it is modified by glycosylation and
 CC phosphorylation, and for determining JAM2 function. The antibodies
 CC inhibit interaction of JAM2 with inflammatory cells or influences their
 CC paracellular migration, and is therefore useful for alleviating
 CC inflammatory diseases such as arthritis, asthma, rheumatoid arthritis,
 CC inflammatory bowel disease and Crohn's disease.
 XX
 SQ Sequence 298 AA;

Query Match 80.5%; Score 240; DB 22; Length 298;
 Best Local Similarity 100.0%; Pred. No. 5.2e-220;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVFVYQQTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
 DB 59 SRLEWKKLGRSVFVYQQTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
 QY 119 QNLEEDTVTLVLVAPAPVSCVPSVSSALSGTVVELRCQDKEGNAPPEYTFWFDGIRLLEN 178
 DB 119 QNLEEDTVTLVLVAPAPVSCVPSVSSALSGTVVELRCQDKEGNAPPEYTFWFDGIRLLEN 178
 QY 179 PRLGQSTNSSTYMTNKTGTLQNTVSKLDTGEYSCAENSQYRCRCRQVDDNLNS 238
 DB 179 PRLGQSTNSSTYMTNKTGTLQNTVSKLDTGEYSCAENSQYRCRCRQVDDNLNS 238
 QY 239 GIIAAVVVALVISVGLGVCAQKRGYFSKETSFKQNSSSKATMTSENDFKHTKSFII 298
 DB 239 GIIAAVVVALVISVGLGVCAQKRGYFSKETSFKQNSSSKATMTSENDFKHTKSFII 298

RESULT 9
 ABP61801
 ID ABP61801 standard; Protein; 298 AA.
 XX
 AC ABP61801;
 XX

DT 04-OCT-2002 (first entry)
 DE Human polypeptide SEQ ID NO 155.
 XX
 KW Human; cytostatic; antirheumatic; antiarthritic; vulnery; analgesic;
 KW antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
 KW neuroprotective; nootropic; osteopathic; haemostatic; vasotropic;
 KW antitumor; fungicide; antidiabetic; antiasthmatic; antiallergic;
 KW immunostimulant; antiparasitic; secreted protein; transmembrane protein;
 KW cytokine; cell proliferation; cell differentiation; autoimmune disease;
 KW stem cell; growth factor; nervous system disease; neuropathy;
 KW Alzheimer's disease; Parkinson's disease; Huntington's disease;
 KW osteoporosis; severe combined immunodeficiency; SCID; infection;
 KW multiple sclerosis; rheumatoid arthritis; gene therapy.
 XX
 OS Homo sapiens.
 XX
 XX US2002065394-A1.
 PN
 XX 30-MAY-2002.
 PD
 XX
 PF 22-DEC-2000; 2000US-0745763.
 XX
 XX 18-MAR-1998; 98US-0040963.
 PR
 XX
 XX (JACO/) JACOBS K.
 PA (MCCO/) MCCOY J M.
 PA (LAVA/) LAVALLIE E R.
 PA (COLL/) COLLINS-RACIE L A.
 PA (EVAN/) EVANS C.
 PA (MERB/) MERBERG D.
 PA (TREA/) TREACY M.
 PA (SPAU/) SPAULDING V.
 XX
 PI Jacobs K, McCoy JM, LaVallie ER, Collins-Racie LA, Evans C;
 PI Merberg D, Treacy M, Spaulding V;
 PI
 XX WPI: 2002-582343/62.
 DR N-PSDB; ABQ92017.
 XX
 PT Novel secreted or transmembrane protein and polynucleotide encoding the
 PT protein, useful for diagnosis and treatment of neurological disorders,
 PT cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
 PT -
 XX
 PS Claim 54; Page 116-117; 284pp; English.
 XX
 CC The invention relates to human secreted or transmembrane protein (I),
 CC their fragments and is encoded by specific complementary deoxyribonucleic
 CC acid (cDNA) inserts (II), where the protein is substantially free from
 CC other mammalian proteins. (I) are useful for preventing, treating or
 CC ameliorating a medical condition, especially immunological treatment or
 CC prevention of tumours. (I) exhibits activity relating to angiogenesis,
 CC cytokine, cell proliferation, cell differentiation, anti-inflammatory,
 CC stem cell growth factor activity and activin or inhibin-related
 CC activities. (I) can be used to manipulate stem cells in culture to give
 CC rise to neuroepithelial cells that can be used to augment or replace
 CC cells damaged by illness, autoimmune disease, accidental damage or
 CC genetic disorders. (I) induces the proliferation of neural cells and
 CC regeneration of nerve and brain tissue and is useful for the treatment of
 CC central and peripheral nervous system diseases and neuropathies, such as
 CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
 CC lateral sclerosis. (I) is involved in chemotactic or chemokinetic
 CC activity, regulation of haematopoiesis and is useful for treating myeloid
 CC or lymphoid cell disorders, platelet disorders such as thrombocytopenia
 CC and for regeneration of bone, cartilage, tendon, ligament and/or nerve
 CC tissue growth and in tissue repair, healing of burns, incisions, ulcers,
 CC for treating osteoporosis, osteoarthritis, bone degenerative disorders or
 CC periodontal disease. (I) is also useful for gut protection or
 CC regeneration and treatment of lung or liver fibrosis, reperfusion injury
 CC in various tissues, various immune deficiencies and disorders including
 CC severe combined immunodeficiency (SCID), bacterial or fungal infections,
 CC autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,

PA (GETH) GENENTECH INC.
 XX Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;
 PI WPI; 1999-229499/19.
 DR N-PSDB; AAX37664.
 DR
 XX Composition containing novel polypeptide PRO245, its agonist or
 PT antagonist -
 XX
 PS Example 1; Fig 2; 177pp; English.
 XX
 CC This invention describes a novel composition containing (apart from a
 CC carrier or excipient), a novel PRO245 polypeptide (I), its agonist or
 CC antagonist, or their fragments, for modulating: (i) infiltration of
 CC inflammatory cells into tissue; (ii) an immune response; or (iii) T cell
 CC proliferation. The composition increases or decreases any of the effects
 CC (i)-(iii). The products of the invention have anti-inflammatory,
 CC anti-autoimmune and anti-diabetic activity. (I), and its (ant)agonists
 CC and their fragments, are used to treat immune-related diseases,
 CC particularly T cell-mediated diseases. The diseases treated include
 CC systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 CC arthritis, spondyloarthropathies, systemic sclerosis (scleroderma),
 CC idiopathic inflammatory myopathies (dermatomyositis, polymyositis),
 CC Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune
 CC hemolytic anemia (immune pancytopenia, paroxysmal nocturnal
 CC purpura immune-mediated thrombocytopenia) (idiopathic thrombocytopenic
 CC purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease,
 CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 CC thyroiditis), diabetes mellitus, immune-mediated renal disease
 CC (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis,
 CC idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic
 CC inflammatory demyelinating polyneuropathy, infectious hepatitis
 CC (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune
 CC chronic active hepatitis, primary biliary cirrhosis, granulomatous
 CC hepatitis, and sclerosing cholangitis, inflammatory bowel disease
 CC (ulcerative colitis; Crohn's disease), gluten-sensitive enteropathy, and
 CC Whipple's disease. Autoimmune or immune-mediated skin diseases including
 CC bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis,
 CC asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity,
 CC urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis,
 CC hypersensitivity pneumonitis, and transplantation associated diseases
 CC (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists
 CC or fragment can also be used as an adjuvant in treatment of tumors.
 CC Antibodies against (I) can also be used for diagnosing such diseases.
 CC This sequence represents the human PRO245 protein described in the
 CC invention.
 XX
 SQ Sequence 312 AA;
 Query Match 77.2%; Score 230; DB 20; Length 312;
 Best Local Similarity 100.0%; Pred. No. 1.8e-210;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 QY 119 QNLEEDTTLVLVAVAPVSPCEVPVSALSGTGVVLRCDQKGNPAPEYTFWFKDGI RLLEN 178
 Db 119 QNLEEDTTLVLVAVAPVSPCEVPVSALSGTGVVLRCDQKGNPAPEYTFWFKDGI RLLEN 178
 QY 179 PRLGSGSTNSSTYMTNTKTGLQNTVSKLDTGYSCEARNVSGYRCPGKRMQVDDLNTS 238
 Db 179 PRLGSGSTNSSTYMTNTKTGLQNTVSKLDTGYSCEARNVSGYRCPGKRMQVDDLNTS 238
 QY 239 GIIAAVVVALVSVGCLGVCAQRKGYFSKETSFOKSNSSSKATTMSN 288
 Db 239 GIIAAVVVALVSVGCLGVCAQRKGYFSKETSFOKSNSSSKATTMSN 288
 RESULT 12
 AAY23324

AAV23324 standard; Protein; 312 AA.
 AAY23324;
 02-SEP-1999 (first entry)
 A33 related antigen PRO245.
 A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease;
 tumour.
 Homo sapiens.
 WO9927098-A2.
 03-JUN-1999.
 20-NOV-1998; 98WO-US24855.
 17-SEP-1998; 98WO-US19437.
 21-NOV-1997; 97US-0066364.
 20-MAR-1998; 98US-0078936.
 (GETH) GENENTECH INC.
 Ashkenazi A, Fong S, Goddard A, Gurney AL, Napier MA;
 Tumas D, Wood WI;
 WPI; 1999-404743/34.
 N-PSDB; AAX81770.
 Antigens PRO301, PRO362 and PRO245 related to A33
 Example 3; Fig 11; 122pp; English.
 The specification describes A33 related antigens PRO301, PRO362 and
 PRO245. The methods and compositions of the invention are useful for the
 treatment and diagnosis of inflammatory disease and tumours in mammals.
 Such inflammatory diseases include of inflammatory bowel disease,
 systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 arthritis, spondyloarthropathies, systemic sclerosis, scleroderma,
 idiopathic inflammatory myopathies, dermatomyositis, polymyositis,
 Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune hemolytic
 anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,
 autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura,
 immune-mediated thrombocytopenia, thyroiditis, Grave's disease,
 Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 thyroiditis, diabetes mellitus, immune-mediated renal disease,
 glomerulonephritis, tubulointerstitial nephritis, demyelinating diseases
 of the central and peripheral nervous systems such as multiple sclerosis,
 idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis,
 A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active
 hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing
 cholangitis, inflammatory and fibrotic lung diseases, gluten-sensitive
 enteropathy, Whipple's disease, autoimmune or immune-mediated skin
 diseases allergic diseases of the lung such as eosinophilic pneumonias,
 idiopathic pulmonary fibrosis and hypersensitivity pneumonitis
 transplantation associated diseases disease. The present sequence
 represents PRO245.
 Query Match 77.2%; Score 230; DB 20; Length 312;
 Best Local Similarity 100.0%; Pred. No. 1.8e-210;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 QY 119 QNLEEDTTLVLVAVAPVSPCEVPVSALSGTGVVLRCDQKGNPAPEYTFWFKDGI RLLEN 178
 Db 119 QNLEEDTTLVLVAVAPVSPCEVPVSALSGTGVVLRCDQKGNPAPEYTFWFKDGI RLLEN 178

QY 179 PRLGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGVYRCPCGRKMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGVYRCPCGRKMQVDDLNIS 238
QY 239 GIIAAVVVVVALVISVGLGVCYAQRKGYSFKETSFKQKSNSSSKATTMSEN 288
Db 239 GIIAAVVVVVALVISVGLGVCYAQRKGYSFKETSFKQKSNSSSKATTMSEN 288
RESULT 13
ID AAY13354
AC AAY13354
XX AAY13354;
DT 25-JUN-1999 (first entry)
DE Amino acid sequence of protein PRO245.
KW Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
OS Homo sapiens.
XX
XX WO9914328-A2.
XX
PD 25-MAR-1999.
XX
XX 16-SEP-1998; 98WO-US19330.
XX
XX 25-NOV-1997; 97US-0066840.
PR 17-SEP-1997; 97US-0059113.
PR 17-SEP-1997; 97US-0059115.
PR 17-SEP-1997; 97US-0059117.
PR 17-SEP-1997; 97US-0059119.
PR 17-SEP-1997; 97US-0059121.
PR 17-SEP-1997; 97US-0059122.
PR 17-SEP-1997; 97US-0059184.
PR 18-SEP-1997; 97US-0059263.
PR 18-SEP-1997; 97US-0059266.
PR 15-OCT-1997; 97US-0062125.
PR 17-OCT-1997; 97US-0062285.
PR 17-OCT-1997; 97US-0062287.
PR 21-OCT-1997; 97US-0063486.
PR 24-OCT-1997; 97US-0062814.
PR 24-OCT-1997; 97US-0062816.
PR 24-OCT-1997; 97US-0063045.
PR 24-OCT-1997; 97US-0063120.
PR 24-OCT-1997; 97US-0063121.
PR 24-OCT-1997; 97US-0063127.
PR 27-OCT-1997; 97US-0063128.
PR 27-OCT-1997; 97US-0063329.
PR 27-OCT-1997; 97US-0063327.
PR 28-OCT-1997; 97US-0063341.
PR 28-OCT-1997; 97US-0063542.
PR 28-OCT-1997; 97US-0063544.
PR 28-OCT-1997; 97US-0063549.
PR 28-OCT-1997; 97US-0063550.
PR 28-OCT-1997; 97US-0063564.
PR 29-OCT-1997; 97US-0063435.
PR 29-OCT-1997; 97US-0063704.
PR 23-OCT-1997; 97US-0063732.
PR 29-OCT-1997; 97US-0063738.
PR 29-OCT-1997; 97US-0063734.
PR 29-OCT-1997; 97US-0064215.
PR 29-OCT-1997; 97US-0063735.
PR 31-OCT-1997; 97US-0063870.

PR 31-OCT-1997; 97US-0064103.
PR 03-NOV-1997; 97US-0064248.
PR 07-NOV-1997; 97US-0064809.
PR 12-NOV-1997; 97US-0065186.
PR 17-NOV-1997; 97US-0065846.
PR 18-NOV-1997; 97US-0065693.
PR 21-NOV-1997; 97US-0066120.
PR 21-NOV-1997; 97US-0066364.
PR 24-NOV-1997; 97US-0066772.
PR 24-NOV-1997; 97US-0066466.
PR 24-NOV-1997; 97US-0066770.
PR 24-NOV-1997; 97US-0066511.
PR 24-NOV-1997; 97US-0066453.
XX
XX (GETH) GENENTECH INC.
XX
XX PI Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
XX DR WPI; 1999-229533/19.
XX DR N-PSDB; AAX52225.
XX
PT New isolated human genes and polypeptides used in, e.g. treatment of
PT gastrointestinal ulceration
PS Claim 12; Fig 24; 320pp; English.
XX
XX AAY13344-403 represent secreted and transmembrane human proteins.
CC The cDNA sequences are obtained from cDNA libraries, prepared from
CC fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
CC The encoded polypeptides have specific uses based on their homology to
CC known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
CC associated with the preservation and maintenance of gastrointestinal
CC mucosa and the repair of acute and chronic mucosal lesions
CC (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
CC ulceration and congenital microvillus atrophy), skin diseases associated
CC with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
CC cancers such as lung squamous cell carcinoma of the vulva and gliomas),
CC potent effects on cell growth and development, diseases related to
CC growth or survival of nerve cells including Parkinson's disease,
CC Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as
CC for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used
CC as a target for anti-tumor drugs. PRO533 may be used in the treatment
CC of Usher Syndrome or Atrophia areata; PRO269 can be used as an
CC anti-thrombotic agent; PRO287 polypeptides and portions may have
CC therapeutic applications in wound healing and tissue repair; PRO317 can
CC be used for treating problems of the kidney, uterus, endometrium, blood
CC vessels, or related tissue, e.g. in the heart of genital tract.
XX
SQ Sequence 312 AA;
Query Match 77.2%; Score 230; DB 20; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYCEVSAPSEQ 118
QY 119 QNLEEDTTLVLVAPVPSCVEVPSSALSGTVVLELRCQDKGNPAPETWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVPSCVEVPSSALSGTVVLELRCQDKGNPAPETWFKDGIRLLEN 178
QY 179 PRLGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGVYRCPCGRKMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTMNTKTGLQFNTVSKLDTGEYSCAARNVGVYRCPCGRKMQVDDLNIS 238
QY 239 GIIAAVVVVVALVISVGLGVCYAQRKGYSFKETSFKQKSNSSSKATTMSEN 288
Db 239 GIIAAVVVVVALVISVGLGVCYAQRKGYSFKETSFKQKSNSSSKATTMSEN 288

RESULT 14
AAB33421

AAAB33421 standard; Protein; 312 AA.
AAAB33421;
29-JAN-2001 (first entry)
Human PRO245 protein UNQ219 SEQ ID NO:36.
XX Human; immune related disease; diagnosis; antinflammatory; cardiant;
XX dermatologic; antiarthritic; antirheumatic; immunosuppressive;
KW haemostatic; antithyroid; antidiabetic; neuroprotective;
KW antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic;
KW osteoarthritis; systemic lupus erythematosus; rheumatoid arthritis;
KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
KW autoimmune thrombocytopenia; immune-mediated renal disease;
KW demyelinating disease; hepatobiliary disease; Whipple's disease;
KW inflammatory bowel disease; gluten-sensitive enteropathy;
KW autoimmune disease; immune-mediated skin disease; allergic disease;
KW immunological disease; transplantation associated disease;
KW graft rejection; graft-versus-host-disease.
XX Homo sapiens.
OS
XX
XX WO200053758-A2.
XX
XX 14-SEP-2000.
XX
XX 02-MAR-2000; 2000WO-US05841.
XX
PR 08-MAR-1999; 99WO-US05028.
PR 10-MAR-1999; 99US-0123618.
PR 12-MAR-1999; 99US-0123957.
PR 23-MAR-1999; 99US-0125775.
PR 12-APR-1999; 99US-0128849.
PR 20-APR-1999; 99WO-US08615.
PR 28-APR-1999; 99US-0131445.
PR 04-MAY-1999; 99US-0132371.
PR 14-MAY-1999; 99US-0134287.
PR 02-JUN-1999; 99WO-US12252.
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 28-JUL-1999; 99US-0146222.
PR 01-SEP-1999; 99WO-US20111.
PR 08-SEP-1999; 99WO-US20594.
PR 13-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 15-SEP-1999; 99WO-US21547.
PR 05-OCT-1999; 99WO-US23089.
PR 29-OCT-1999; 99US-0162506.
PR 30-NOV-1999; 99WO-US28214.
PR 30-NOV-1999; 99WO-US28313.
PR 30-NOV-1999; 99WO-US28409.
PR 01-DEC-1999; 99WO-US28301.
PR 01-DEC-1999; 99WO-US28634.
PR 02-DEC-1999; 99WO-US28551.
PR 02-DEC-1999; 99WO-US28564.
PR 02-DEC-1999; 99WO-US28565.
PR 16-DEC-1999; 99WO-US30095.
PR 20-DEC-1999; 99WO-US30999.
PR 30-DEC-1999; 99WO-US31274.
PR 05-JAN-2000; 2000WO-US00219.
PR 06-JAN-2000; 2000WO-US00277.
PR 06-JAN-2000; 2000WO-US00376.
PR 11-FEB-2000; 2000WO-US03565.
PR 18-FEB-2000; 2000WO-US04341.
PR 22-FEB-2000; 2000WO-US04342.
PR 22-FEB-2000; 2000WO-US04414.
(GETH) GENENTECH INC.
XX
XX

PI Aahkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
XX
DR WPI; 2000-572271/53.
DR N-PSDB; AAC58586.
XX
PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of
PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
XX
PS Claim 33; Fig 16; 309pp; English.
XX
CC The present invention describes sixty four human PRO proteins which can
CC be used in the treatment of immune related diseases. The human PRO
CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
CC treating and diagnosing immune related disorders. The disorders are
CC selected from systemic lupus erythematosus, rheumatoid arthritis,
CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
CC anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus,
CC immune-mediated renal disease, demyelinating diseases of the central
CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
CC autoimmune or immune-mediated skin diseases, allergic diseases,
CC immunological diseases of the lung, and transplantation associated
CC diseases including graft rejection and graft-versus-host-disease.
CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
CC sequences given in the exemplification of the present invention.
XX
SQ Sequence 312 AA;
Query Match 77.2%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKGLGRSVFVYQQTLOGDFKNRAEMIDFNIRKNVTRSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKGLGRSVFVYQQTLOGDFKNRAEMIDFNIRKNVTRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTVTLEVLVAVPSPCEVPSALSGLSGTVELRCQDEKGNPAPEYTFWKDGIRLEN 178
DB 119 QNLEEDTVTLEVLVAVPSPCEVPSALSGLSGTVELRCQDEKGNPAPEYTFWKDGIRLEN 178
QY 179 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLDTGCEYSCEARNVGYRRCPCGRMQVDDLNIS 238
DB 179 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLDTGCEYSCEARNVGYRRCPCGRMQVDDLNIS 238
QY 239 GIIAAVVVVALVISVCGLVGVCAQRKGYFSKETSFKQSNSSSKATTMSN 288
DB 239 GIIAAVVVVALVISVCGLVGVCAQRKGYFSKETSFKQSNSSSKATTMSN 288
RESULT 15
AAB24401
ID AAB24401 standard; Protein; 312 AA.
XX
AC AAB24401;
XX
DT 07-NOV-2000 (first entry)
XX
DE Human PRO245 protein sequence SEQ ID NO:67.
XX
KW Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
KW cytostatic; gene therapy; vaccine.
XX
OS Homo sapiens.
XX

PN WO200032221-A2.
XX
PD
XX
XX 08-JUN-2000.
XX
PF 30-NOV-1999; 99WO-US28313.
XX
XX 01-DEC-1998; 98WO-US25108.
XX 16-DEC-1998; 98US-0112850.
PR 12-JAN-1999; 99US-0115554.
PR 08-MAR-1999; 99WO-US05028.
PR 12-MAR-1999; 99US-0123957.
PR 28-APR-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0134287.
PR 02-JUN-1999; 99WO-US12252.
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99WO-US20111.
PR 08-SEP-1999; 99WO-US20594.
PR 13-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 15-SEP-1999; 99WO-US21547.
PR 05-OCT-1999; 99WO-US23089.
PR 23-OCT-1999; 99US-0162506.
XX
PA (GETH) GENENTECH INC.
XX
XX Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;
PI Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;
PI Watanabe CK, Williams PM, Wood WI;
XX
DR WPI; 2000-412154/35.
DR N-PSDB; AAA77562.
XX
XX
XX Nucleic acids encoding PRO polypeptides useful for preventing
PT diagnosing and treating diagnosing a cardiovascular, endothelial or
PT angiogenic disorders in mammals -
XX
XX Claim 72; Fig 28; 315pp; English.
XX
XX The present invention describes nucleic acids encoding PRO polypeptides
CC useful for preventing, diagnosing and treating diagnosing a
CC cardiovascular, endothelial or angiogenic disorder in mammals by
CC modulating cell proliferation, angiogenesis and cardiovascularisation,
CC and for identifying agonists and antagonists of these processes. The
CC nucleic acids and the proteins they encode may be used in the
CC prevention, treatment and diagnosis of diseases associated with
CC inappropriate PRO expression such as cardiovascular, endothelial or
CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and
CC cardiac hypertrophy). For example, the nucleic acids (NCs) and vectors
CC containing them and the PRO polypeptide may be used to treat disorders
CC associated with decreased PRO expression. AAA77510 to AAA77721 and
CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in
CC the exemplification of the present invention.
XX
SQ Sequence 312 AA;
Query Match 77.2%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKLGSRVSFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
DB 59 SRLEWKLGSRVSFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
QY 119 QNLEEDTVTLVLVAPVAVPSCVPSSALSGTVVELRCQEGNPAPETWFKDGI RLLEN 178
DB 119 QNLEEDTVTLVLVAPVAVPSCVPSSALSGTVVELRCQEGNPAPETWFKDGI RLLEN 178
QY 179 PRLGSTNSSTYMTNTKTGLTFNTVSKLDTGEYSCEARNVGYRCRPGKRMQVDDLNIS 238
DB 179 PRLGSTNSSTYMTNTKTGLTFNTVSKLDTGEYSCEARNVGYRCRPGKRMQVDDLNIS 238

QY 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288
DB 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288

Search completed: December 9, 2003, 17:36:04
Job time : 55.6481 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:34:36 ; Search time 15.5749 Seconds
(without alignments)
809.548 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARRSRHRLLLRLYLVA.....SSKATMSNDPKHTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 328717 seqs, 42310858 residues

Word size : 30

Total number of hits satisfying chosen parameters: 2

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Issued Patents AA:*
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6: /cgn2_6/ptodata/1/1aa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	296	99.3	298	4	US-09-152-060-76
2	230	77.2	312	4	US-09-254-465A-9

ALIGNMENTS

RESULT 1
US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P1.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; EARLIER FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30

RESULT 2

US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33-RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21

; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,368
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

Query Match 99.3%; Score 296; DB 4; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.9e-276;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLYLVALGYKAYGFSAPKQDQVTVAVYQEAAILACKTPKKTVXSR 60
Db 1 MARRSRHRLLLRLYLVALGYKAYGFSAPKQDQVTVAVYQEAAILACKTPKKTVXSR 60
QY 61 LEWKLGSRVSFVYQOQLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
Db 61 LEWKLGSRVSFVYQOQLQDGFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGN 120
QY 121 LEEDTVTLVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPETWFKOGIRLLENPR 180
Db 121 LEEDTVTLVLVAPAVPSCEVPSSALSGTVVELRCQDKEGNPAPETWFKOGIRLLENPR 180
QY 181 LGSQSTNSSYTMNTKTGLTFQNTVSKLDTGBYSCEARNISVGYRRCGRMVDLNLISGI 240
Db 181 LGSQSTNSSYTMNTKTGLTFQNTVSKLDTGBYSCEARNISVGYRRCGRMVDLNLISGI 240
QY 241 IAAVVVALVTSVCGLVGCYVQAKRGYFSKETSFOKSNSSSKATMSNDPKHTKSFII 298
Db 241 IAAVVVALVTSVCGLVGCYVQAKRGYFSKETSFOKSNSSSKATMSNDPKHTKSFII 298

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; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Query Match      77.2%; Score 230; DB 4; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.7e-212;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTVTLVLVAPVPSCVPSALSCTVVELRCQDKEGPNPAPEYTFWKDGIRLLEN 178
Db 119 QNLEEDTVTLVLVAPVPSCVPSALSCTVVELRCQDKEGPNPAPEYTFWKDGIRLLEN 178
QY 179 PRIGSQSTNSSYTMNTKTGTQLQNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
Db 179 PRIGSQSTNSSYTMNTKTGTQLQNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
QY 239 GIIAAVVVALVISVGLGVCAQKGYFSKETSFOKSNSSSKATTMSSEN 288
Db 239 GIIAAVVVALVISVGLGVCAQKGYFSKETSFOKSNSSSKATTMSSEN 288

Search completed: December 9, 2003, 17:39:14
Job time : 15.5749 secs
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; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match          99.3%; Score 296; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-269;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARRSRRLRLLLRLYLVALGYHKA YGFSAPKQQVVTA VXYQEAILACKTPKKT VYXSR 60
Db 1 MARRSRRLRLLLRLYLVALGYHKA YGFSAPKQQVVTA VXYQEAILACKTPKKT VYXSR 60
Qy 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTVTLVLVAPAPVSCVPSSALSGTVVLELRCQDKEGNPAP EYTWFKDGI RLLLENPR 180
Db 121 LEEDTVTLVLVAPAPVSCVPSSALSGTVVLELRCQDKEGNPAP EYTWFKDGI RLLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGTLQFNVT VSKLDTGEYSCEARN SVGYRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSYTMNTKTGTLQFNVT VSKLDTGEYSCEARN SVGYRCPGKRMQVDDLNISGI 240
Qy 241 IAAVVVVALVISVCGLVGCYVQAQRKG YFSKETSFOKSNSSSKAT TMSENDFKHTKSFII 298
Db 241 IAAVVVVALVISVCGLVGCYVQAQRKG YFSKETSFOKSNSSSKAT TMSENDFKHTKSFII 298

RESULT 2
US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US2002007287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P4
; CURRENT APPLICATION NUMBER: US/09/852,659A
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76

; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76

Query Match          99.3%; Score 296; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-269;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MARRSRRLRLLLRLYLVALGYHKA YGFSAPKQQVVTA VXYQEAILACKTPKKT VYXSR 60
Db 1 MARRSRRLRLLLRLYLVALGYHKA YGFSAPKQQVVTA VXYQEAILACKTPKKT VYXSR 60
Qy 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEOGQN 120
Db 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVT RSDAGKYRCEVSAPSEOGQN 120
Qy 121 LEEDTVTLVLVAPAPVSCVPSSALSGTVVLELRCQDKEGNPAP EYTWFKDGI RLLLENPR 180
Db 121 LEEDTVTLVLVAPAPVSCVPSSALSGTVVLELRCQDKEGNPAP EYTWFKDGI RLLLENPR 180
Qy 181 LGSQSTNSSYTMNTKTGTLQFNVT VSKLDTGEYSCEARN SVGYRCPGKRMQVDDLNISGI 240
Db 181 LGSQSTNSSYTMNTKTGTLQFNVT VSKLDTGEYSCEARN SVGYRCPGKRMQVDDLNISGI 240
Qy 241 IAAVVVVALVISVCGLVGCYVQAQRKG YFSKETSFOKSNSSSKAT TMSENDFKHTKSFII 298
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RESULT 3
US-09-852-797-76
; Sequence 76, Application US/09852797
; Patent No. US2002017294A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.3%; Score 296; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-269; Indels 0; Gaps 0;
Matches 298; Conservative 0; Mismatches 0;

QY 1 MARRSRRLRLRLRLVVALGYHAYGFSAPKDDQVVTAVYQEAIALACKTPKTVXSR 60
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DB 241 IAAVVVALVISVGLGVCAORGYFSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 4
US-09-745-763-38
Sequence 38, Application US/09745763
Patent No. US20020065394A1
GENERAL INFORMATION:
APPLICANT: Jacobs, Kenneth
McCoy, John M.
LaVallie, Edward R.
Collins-Racie, Lisa A.
Evans, Cheryl
Merberg, David
Treacy, Maurice
Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 219
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genetics Institute, Inc.
STREET: 87 CambridgePark Drive
CITY: Cambridge
STATE: MA
COUNTRY: U.S.A.
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-Jun-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sprunger, Suzanne A.

REGISTRATION NUMBER: 41,323
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 498-8284
TELEFAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 38:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

Query Match 80.5%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217; Indels 0; Gaps 0;
Matches 240; Conservative 0; Mismatches 0;

QY 59 SRLEWKLGSRVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
DB 59 SRLEWKLGSRVSFVYYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
QY 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 179 PRIGSOSTNSSTNTKTGTTLQNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238
DB 179 PRIGSOSTNSSTNTKTGTTLQNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238
QY 239 GIIAAVVVALVISVGLGVCAORGYFSKETSFOKSNSSSKATTMSNDPKHTKSFII 298
DB 239 GIIAAVVVALVISVGLGVCAORGYFSKETSFOKSNSSSKATTMSNDPKHTKSFII 298

RESULT 5
US-09-799-777-30
Sequence 30, Application US/09799777
Patent No. US20020091244A1
GENERAL INFORMATION:
APPLICANT: Lal, Preeti
Hillman, Jennifer L.
Corley, Neil C.
Guegler, Karl J.
Baugh, Mariah
Sather, Susan
Shah, Purvi
TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS
NUMBER OF SEQUENCES: 154
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/799,777
FILING DATE: 06-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/002,485
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: BILLINGS, LUCY J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0459 US
TELECOMMUNICATION INFORMATION:

; TELEPHONE: (650) 855-0555
; TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 298 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: DUDNOT02
; CLONE: 1704050
; SEQUENCE DESCRIPTION: SEQ ID NO: 30:
US-09-799-777-30

Query Match 80.5%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRQDKEGNAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRQDKEGNAPEYTWFKDGIRLLEN 178

Qy 179 PRLGQSQTNSSTYTWNTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238
Db 179 PRLGQSQTNSSTYTWNTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298
Db 239 GIITAAVVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298

RESULT 6
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barrios, Maria Pia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rockety, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-616-5400
; TELEFAX: 312-616-5460
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:

; LENGTH: 298 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

Query Match 80.5%; Score 240; DB 15; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRQDKEGNAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRQDKEGNAPEYTWFKDGIRLLEN 178

Qy 179 PRLGQSQTNSSTYTWNTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238
Db 179 PRLGQSQTNSSTYTWNTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298
Db 239 GIITAAVVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298

RESULT 7
US-10-192-791-2
; Sequence 2, Application US/10192791
; Publication No. US20030130166A1
; GENERAL INFORMATION:
; APPLICANT: Texas Biotechnology Corporation
; TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
; FILE REFERENCE: TEX4542P0430
; CURRENT APPLICATION NUMBER: US/10/192,791
; CURRENT FILING DATE: 2003-12-10
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-192-791-2

Query Match 80.5%; Score 240; DB 16; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYYQQTTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYYQQTTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRQDKEGNAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVVLRQDKEGNAPEYTWFKDGIRLLEN 178

Qy 179 PRLGQSQTNSSTYTWNTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238
Db 179 PRLGQSQTNSSTYTWNTKTGLQFNTVSKLDTGYSCEARNVGVYRRCPCGRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298
Db 239 GIITAAVVVVALVISVCGLVGYAQRKGYSKETSFKNSSSSKATTMSENDFKHTKSFII 298

RESULT 8
US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.

APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,320
CURRENT FILING DATE: 2002-01-04
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1998-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 64
LENGTH: 312
TYPE: PRT
ORGANISM: Homo sapiens
US-09-909-320-64

RESULT 9

US-09-909-088B-64
Sequence 64, Application US/09909088B
Patent No. US20020146709A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,088B
CURRENT FILING DATE: 2001-07-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLVAPVAPVCEVPSSALSGTIVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVCEVPSSALSGTIVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178

QY 179 PRIGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238
Db 179 PRIGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238

QY 239 GIIAAVVVALVISVCGLVGCYVQAKRGYFSKETSFOKSNSSSKATTMSEN 288
Db 239 GIIAAVVVALVISVCGLVGCYVQAKRGYFSKETSFOKSNSSSKATTMSEN 288

RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
```

```
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; CURRENT FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLVAPVAPVCEVPSSALSGTIVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPVCEVPSSALSGTIVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178

QY 179 PRIGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238
Db 179 PRIGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238

QY 239 GIIAAVVVALVISVCGLVGCYVQAKRGYFSKETSFOKSNSSSKATTMSEN 288
Db 239 GIIAAVVVALVISVCGLVGCYVQAKRGYFSKETSFOKSNSSSKATTMSEN 288

RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
```

APPLICANT: Fong, Sherman
APPLICANT: Goddard, Audrey
APPLICANT: Gurney, Austin L.
APPLICANT: Napier, Mary A.
APPLICANT: Tumas, Daniel
APPLICANT: Wood, William I.
TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
FILE REFERENCE: P1216R1 (US)
CURRENT APPLICATION NUMBER: US/09/953,499
CURRENT FILING DATE: 2001-09-14
PRIOR APPLICATION NUMBER: US/09/254,465
PRIOR FILING DATE: 1999-03-05
PRIOR APPLICATION NUMBER: PCT/US98/24855
PRIOR FILING DATE: 1998-11-20
PRIOR APPLICATION NUMBER: US 60/066,364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: US 60/078,936
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: PCT/US98/19437
PRIOR FILING DATE: 1998-09-17
NUMBER OF SEQ ID NOS: 30
SEQ ID NO 9
LENGTH: 312
TYPE: PRT
ORGANISM: Homo sapiens
US-09-953-499-9

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVFVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVFVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTVTLVLVAVAPVCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178
DB 119 QNLEEDTVTLVLVAVAPVCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178

QY 179 PRLGQSSTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
DB 179 PRLGQSSTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238

QY 239 GIIAAVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSEN 288
DB 239 GIIAAVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSEN 288

RESULT 12
US-09-902-853-64
Sequence 64, Application US/09902853
Publication No. US20020192659A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James

APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/902,853
CURRENT FILING DATE: 2001-07-10
PRIOR APPLICATION NUMBER: US/09/665,350
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 64
LENGTH: 312
TYPE: PRT
ORGANISM: Homo Sapien
US-09-902-853-64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVFVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVFVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTVTLVLVAVAPVCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178
DB 119 QNLEEDTVTLVLVAVAPVCEVPSSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLEN 178

QY 179 PRLGQSSTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
DB 179 PRLGQSSTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238

QY 239 GIIAAVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSEN 288
DB 239 GIIAAVVVALVISVCGLVGYCAQRKGYSKETSFOKSNSSSKATTMSEN 288

[illegible]

```

; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYQQTLQGDGPKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYQQTLQGDGPKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTVTLVLVAPVPSCVEPSSALSGTGVVLRQDKEGPNAPPEYTFKDGIRLLEN 178
Db 119 QNLEEDTVTLVLVAPVPSCVEPSSALSGTGVVLRQDKEGPNAPPEYTFKDGIRLLEN 178

QY 179 PRIGSQSTNSSTYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGVYRCPQGRQVQDNLNIS 238
Db 179 PRIGSQSTNSSTYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGVYRCPQGRQVQDNLNIS 238

QY 239 GIIAAVVVVALVIVCGLGVCYVQAKRGYFSKETSFOKSSSSSKATTMSN 288
Db 239 GIIAAVVVVALVIVCGLGVCYVQAKRGYFSKETSFOKSSSSSKATTMSN 288

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavlin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

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; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db |||||||
QY 119 QNLEEDTTLVLELVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGI RLLEN 178
Db |||||||
QY 179 PRLGQSQTNSSTYMTKTGTLOFNVTSKLDTGEYSCEARNSVGYRRCPCGRMQVDDNLIS 238
Db |||||||
QY 239 GIIAAVVVVVALVISVCGLGVCYAQRKGYPFSKTSFQKNSSSSKATTMSN 288
Db |||||||
QY 239 GIIAAVVVVVALVISVCGLGVCYAQRKGYPFSKTSFQKNSSSSKATTMSN 288
Db |||||||
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```

RESULT 15
US-09-904-011-64
; Sequence 64, Application US/09904011
; Publication No. US2003000330A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Macher, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
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; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      77.2%; Score 230; DB 11; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGRSVSFVYYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db |||||||
QY 119 QNLEEDTTLVLELVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGI RLLEN 178
Db |||||||
QY 179 PRLGQSQTNSSTYMTKTGTLOFNVTSKLDTGEYSCEARNSVGYRRCPCGRMQVDDNLIS 238
Db |||||||
QY 239 GIIAAVVVVVALVISVCGLGVCYAQRKGYPFSKTSFQKNSSSSKATTMSN 288
Db |||||||
QY 239 GIIAAVVVVVALVISVCGLGVCYAQRKGYPFSKTSFQKNSSSSKATTMSN 288
Db |||||||
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Search completed: December 9, 2003, 17:47:07
Job time : 37.8223 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:33:14 ; Search time 14.5366 Seconds
(without alignments)
1971.458 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRRLLLLLRLVVA.....SSKATTMSSENDPKHTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 283308 seqs, 96168682 residues

Word size : 30

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : PIR_76:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
---------------	-------	----------------	--------	-------	-------------

No matches found

Search completed: December 9, 2003, 17:38:31
Job time : 14.5366 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:26:43 ; Search time 10.3833 Seconds
(without alignments)
1349.666 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRHRLLLRLVVA.....SSKATTMSNDKFKTKSFII 298

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 127863 seqs, 47026705 residues

Word size : 30

Total number of hits satisfying chosen parameters: 1

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Match	Length	DB ID	Description
1	240	80.5	298	1	JAM2_HUMAN
					P57087 homo sapien

ALIGNMENTS

RESULT 1
JAM2_HUMAN
ID JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087;
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE Junction-associated molecule) (VE-JAM).
GN JAM2 OR VEJAM OR C21ORF43.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
[1]
SEQUENCE FROM N.A.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;
FT "Vascular endothelial junction-associated molecule, a novel member of
FT the immunoglobulin superfamily, is localized to intercellular
FT boundaries of endothelial cells.";
RL J. Biol. Chem. 275:19139-19145(2000).
[2]
SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976;

```
FT CARBOHYD 98      98      N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 187     187     N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 236     236     N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 298 AA; 33207 MW; CA78E518E22DCAEE CRC64;

Query Match      80.5%; Score 240; DB 1; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.1e-214; Indels 0; Gaps 0;
Matches 240; Conservative 0; Mismatches 0;

Qy 59 SRLEWKKLGRSVSFVYQQTLQGDfKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFVYQQTLQGDfKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTVTLVLVAPVPSCVPSSALSGTVVLRCDKEGNDAPETWFKDGIRLLEN 178
Db 119 QNLEEDTVTLVLVAPVPSCVPSSALSGTVVLRCDKEGNDAPETWFKDGIRLLEN 178

Qy 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNISVGYRRCPKRMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCEARNISVGYRRCPKRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLGVCYAQRKGYFSKETSFKSNSSSKATTMSENDFKHTKSFII 298
Db 239 GIITAAVVVVALVISVCGLGVCYAQRKGYFSKETSFKSNSSSKATTMSENDFKHTKSFII 298
```

Search completed: December 9, 2003, 17:36:26
Job time : 11.3833 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:32:33 ; Search time 37.899 Seconds
(without alignments)
2029.071 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARRSRHRLLLLLLRYLVVA.....SSKATTMSNDFKTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 830525 seqs, 258052604 residues

Word size : 30

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

- Database : SPTREMBL 23:*
- 1: sp_archaea:*
 - 2: sp_bacteria:*
 - 3: sp_fungi:*
 - 4: sp_human:*
 - 5: sp_invertebrate:*
 - 6: sp_mammal:*
 - 7: sp_mhc:*
 - 8: sp_organelle:*
 - 9: sp_phage:*
 - 10: sp_plant:*
 - 11: sp_rodent:*
 - 12: sp_virus:*
 - 13: sp_vertebrate:*
 - 14: sp_unclassified:*
 - 15: sp_rvirus:*
 - 16: sp_bacteriap:*
 - 17: sp_archheap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description

No matches found.

Search completed: December 9, 2003, 17:38:06
Job time : 53.899 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:13:47 ; Search time 39.4564 Seconds
(without alignments)
1198.803 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRRLRLRLRLVVA.....SSKATTMSNDPKHTKSFII 298

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1107863 seqs, 158726573 residues

Word size : 50

Total number of hits satisfying chosen parameters: 40

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : A_Geneseq_19Jun03.*

1: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
3: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*
4: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1983.DAT.*
5: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1984.DAT.*
6: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1985.DAT.*
7: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1986.DAT.*
8: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1987.DAT.*
9: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1988.DAT.*
10: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1989.DAT.*
11: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1990.DAT.*
12: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1991.DAT.*
13: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1992.DAT.*
14: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1993.DAT.*
15: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1994.DAT.*
16: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1995.DAT.*
17: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1996.DAT.*
18: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1997.DAT.*
19: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1998.DAT.*
20: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1999.DAT.*
21: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
24: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	296	99.3	298	19 AAW75220	Human secreted pro.
2	296	99.3	298	23 AAE26983	Human gene 25 enco
3	296	99.3	298	23 AAE27121	Human gene 25 enco
4	296	99.3	298	24 ABR47926	Human secreted pro
5	296	99.3	298	24 ABU64994	Human secreted pro
6	296	99.3	298	24 ABR00172	Human gene 162 enc
7	240	80.5	298	19 AAW85457	Secreted protein e
8	240	80.5	298	22 AAU00512	Human functional a
9	240	80.5	298	23 ABP61801	Human polypeptide

10	240	80.5	298	24 AAO16452	Human functional a
11	230	77.2	312	20 AAY08060	Human PRO245 prote
12	230	77.2	312	20 AAY23324	A33 related antige
13	230	77.2	312	20 AAY13354	Amino acid sequenc
14	230	77.2	312	21 AAB33421	Human PRO245 prote
15	230	77.2	312	21 AAB24401	Human PRO245 prote
16	230	77.2	312	21 AAY70668	Human PRO245 prote
17	230	77.2	312	22 AAU12339	Human PRO245 polyp
18	230	77.2	312	22 AAU00821	Human immune respo
19	230	77.2	312	22 AAB80222	Human PRO245 prote
20	230	77.2	312	22 AAB50904	Human PRO245 prote
21	230	77.2	312	22 AAB53081	Human angiogenesis
22	230	77.2	312	24 ABU69632	Novel human secret
23	230	77.2	312	24 ABU71455	Human PRO polypept
24	230	77.2	312	24 ABU71901	Human secreted/tra
25	230	77.2	312	24 ABU07738	Human A-33 related
26	230	77.2	312	24 ABU66737	Human PRO polypept
27	230	77.2	312	24 ABU67013	Human secreted/tra
28	230	77.2	312	24 ABU67355	Human secreted pro
29	230	77.2	312	24 ABU59818	Novel secreted and
30	230	77.2	312	24 ABU64509	Human secreted/tra
31	230	77.2	312	24 ABU54357	Human polypeptide
32	222	74.5	222	22 AAM41947	Human confluency r
33	215	72.1	215	22 AAB70500	Angiogenesis prote
34	183	61.4	213	21 AAB27277	Human EST encoded
35	166	55.7	303	22 AAM23693	Human polypeptide
36	107	35.9	107	22 AAM40161	Novel human diagno
37	89	29.9	388	22 ABG22341	Novel human diagno
38	73	24.5	140	22 ABG22338	Novel human diagno
39	69	23.2	69	22 ABG22339	Novel human diagno
40	51	17.1	66	22 ABG22340	Novel human diagno

ALIGNMENTS

RESULT 1

AAW75220
ID AAW75220 standard; Protein; 298 AA.

AC AAW75220;
XX

DT 29-JAN-1999 (first entry)

XX Human secreted protein encoded by gene 25 clone HTBEB42.

XX Human; secreted protein; fusion protein; gene therapy; protein therapy;
KW diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
KW developmental abnormality; foetal deficiency; blood; allergy; renal;
KW immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
KW inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
KW cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
KW osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
KW endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
XX
OS Homo sapiens.

XX Key Location/Qualifiers
FH Misc-difference 42

FT Misc-difference 58 /label= unknown

FT Misc-difference 58 /label= unknown

XX WO9840483-A2.

XX 17-SEP-1998.

XX 12-MAR-1998; 98WO-US04858.

XX 19-DEC-1997; 97US-0068368.

XX 14-MAR-1997; 97US-0040710.

XX 30-MAY-1997; 97US-0048100.

CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
CC disease, Crohn's disease, hematopoietic disorders, respiratory
CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,
CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
CC ischemic brain injury and/or stroke, neurodegenerative disorders e.g.,
CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
CC prion disease, cardiovascular disorders e.g., myocardiitis, arrhythmias,
CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
CC related disorder (thrombosis, arterial thrombosis, atherosclerosis),
CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
CC renal disorders e.g. acute glomerulonephritis, neurological diseases,
CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
CC disease, hyperpituitarism, infectious diseases and reproductive system
CC disorders e.g. endometriosis. The present sequence represents a human
CC secreted protein of the invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 296; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLLLRLYLVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSR 60
DB 1 MARRSRHRLLLLLRLYLVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSR 60

QY 61 LEWKKLGRSVFVYQOQTQGFQKNAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
DB 61 LEWKKLGRSVFVYQOQTQGFQKNAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120

QY 121 LEEDVTTLVLVAPVPSCEVPSSALSGTVVELRQDKEGNAPEYTFWPKDGIRLLENPR 180
DB 121 LEEDVTTLVLVAPVPSCEVPSSALSGTVVELRQDKEGNAPEYTFWPKDGIRLLENPR 180

QY 181 LGSQSTNSSTYMTNTGTGLQFNTVSKLDTGEYSCEARNISVGYRRCPGRMQVDDNLNISI 240
DB 181 LGSQSTNSSTYMTNTGTGLQFNTVSKLDTGEYSCEARNISVGYRRCPGRMQVDDNLNISI 240

QY 241 TAAVVVVALVSVGLGVCVYAKRGYFSKETSFKQSNSSSKATTMSENDFKHTKSFII 298
DB 241 TAAVVVVALVSVGLGVCVYAKRGYFSKETSFKQSNSSSKATTMSENDFKHTKSFII 298

RESULT 3
AAE27121
ID AAE27121 standard; Protein; 298 AA.
AC AAE27121;
XX AAE27121;
XX 13-DEC-2002 (first entry)
XX Human gene 25 encoded secreted protein HTEB42, SEQ ID NO:76.
XX Human; secreted protein; autoimmune disease; hyperproliferative disorder;
KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
KW cerebral ischaemia; cardiovascular disorder; nervous system disorder;
KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
KW infection; corneal infection; skin aging; food additive; preservative;
KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
KW cardiant; vasotropic; cerebroprotective; neurotropic; neuroprotective;
KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
KW vulnary.

OS Homo sapiens.
XX
XX Key Location/Qualifiers
FH Peptide 1..22
FT /label= Signal_peptide
FT 23..298
FT /note= "Mature human secreted protein"

FT Misc-difference 42 /label= Unknown
FT /note= "Encoded by GWG"
FT Misc-difference 58
FT /label= Unknown
FT /note= "Encoded by TSC"
PN US2002076756-A1.
XX 20-JUN-2002.
XX 11-MAY-2001; 2001US-0853161.
XX 02-FEB-2001; 2001US-265583P.
XX (RUBE/) RUBEN S M.
PA (ROSE/) ROSEN C A.
PA (LIYV/) LI Y.
PA (ZENG/) ZENG Z.
PA (KYAW/) KYAW H.
PA (FYSC/) FISCHER C L.
PA (LIHH/) LI H.
PA (SOPP/) SOPPET D R.
PA (GENT/) GENTZ R L.
PA (WEIV/) WEI Y.
PA (MOOR/) MOORE P A.
PA (YOUN/) YOUNG P E.
PA (GREE/) GREENE J M.
PA (FERR/) FERRIE A M.
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX WPI; 2002-574454/61.
DR N-PSDB; AAD44878.
XX New nucleic acid molecules encoding 28 human secreted proteins, useful
PT for diagnosing, preventing, treating or ameliorating medical conditions
PT and as food additives or preservatives -
XX Claim 11; Page 186-187; 209pp; English.
XX AAD44854-AAD44984 represent cDNAs corresponding to 28 human secreted
CC protein genes, and AAE27097-AAE27137 represent the proteins they encode.
CC AAE27138-AAE27164 represent human secreted protein fragments. The genes
CC and their corresponding secreted proteins are useful for preventing,
CC treating or ameliorating medical conditions e.g., by protein or gene
CC therapy. Secreted protein sequences of the invention are useful for the
CC diagnosis or treatment of disorders such as autoimmune diseases (e.g.
CC rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
CC the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
CC angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
CC system disorders (e.g. Alzheimer's disease), infections caused by fungi,
CC bacteria and viruses and ocular disorders (e.g. corneal infection). The
CC polypeptides can also be used to aid wound healing and epithelial cell
CC proliferation, to prevent skin aging due to sunburn, to maintain organs
CC before transplantation, for supporting cell culture of primary tissues,
CC to regenerate tissues and in chemotaxis. They can also be used as food
CC additives or preservative to increase or decrease storage capabilities,
CC fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
CC and other nutritional components. The present sequence represents a human
CC secreted protein of the invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 296; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSR 60
DB 1 MARRSRHRLLLRLYLVALGYHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSR 60

QY 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTBDAKGYRCEVSAPSEQON 120
 DB 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTBDAKGYRCEVSAPSEQON 120
 QY 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVLRCDKEGKGNPAPEYTFWFKDGIRLLENPR 180
 DB 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVLRCDKEGKGNPAPEYTFWFKDGIRLLENPR 180
 QY 181 LGSOSTNSSYTMNTKTGTLQENTVSKLDTGYSCEARNVSGYRRCPCGKRMQVDDNLNLSGI 240
 DB 181 LGSOSTNSSYTMNTKTGTLQENTVSKLDTGYSCEARNVSGYRRCPCGKRMQVDDNLNLSGI 240
 QY 241 IAAVVVALVSVCGLVGVCYVAQRKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298
 DB 241 IAAVVVALVSVCGLVGVCYVAQRKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298

RESULT 4

ABR47926
 ID ABR47926 standard; Protein; 298 AA.

XX ABR47926;

DT 12-JUN-2003 (first entry)

XX Human secreted protein, SEQ ID 817.

DE XX Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
 KW vulnerable; antiinflammatory; nootropic; neuroprotective;
 KW antiparkinsonian; gene therapy; human; cardiovascular disorder.

XX Homo sapiens.

XX WO200295010-A2.

PN 28-NOV-2002.

XX 19-MAR-2002; 2002WO-US09785.

XX 21-MAR-2001; 2001US-277340P.

PR 19-JUL-2001; 2001US-306171P.

PR 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

PA Rosen CA, Ruben SM;

XX WPI; 2003-129429/12.

PT Novel human secreted proteins, useful for detecting, preventing,
 PT diagnosing, prognosticating, treating and/or ameliorating
 PT cardiovascular disorders such as arrhythmia -

XX Claim 13; SEQ ID 817; 1881pp; English.

XX The present invention relates to novel human secreted proteins
 CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
 CC proteins and their coding sequences are useful for the preparation of a
 CC diagnostic or pharmaceutical composition for diagnosing or treating a
 CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
 CC coronary arteriosclerosis and myocardial ischemia), neural disorders,
 CC immune system disorders, muscular disorders, reproductive disorders,
 CC gastrointestinal disorders, pulmonary disorders, renal disorders,
 CC proliferative disorders and/or cancerous diseases and conditions, for
 CC wound healing and epithelial cell proliferation, to treat inflammation or
 CC infection, for treating thrombosis and arteriosclerosis, for treating or
 CC preventing neural damage which occurs in neuronal disorders or
 CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
 CC disease, to enhance bone and periodontal regeneration and aid in tissue
 CC transplants or bone grafts, to prevent skin aging or hair loss, to
 CC stimulate growth and differentiation of hematopoietic cells and bone
 CC marrow cells when used in combination with other cytokines, to maintain

CC organs before transplantation or for supporting cell culture of primary
 CC tissues, to increase or decrease differentiation or proliferation of
 CC embryonic stem cells, or to modulate mammalian characteristics or
 CC metabolism.

CC Note: The sequence data for this patent was published in electronic
 CC format and is available from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.

XX Sequence 298 AA;

Query Match 99.3%; Score 296; DB 24; Length 298;

Best Local Similarity 100.0%; Pred. No. 2.5e-273; Indels 0; Gaps 0;
 Matches 298; Conservative 0; Mismatches 0;

QY 1 MARRSRHRLRLRLRLRYLVVALGYHKKAYGFSAPKDDQVVTAVYQEAIALACKTPKKTVKSR 60

DB 1 MARRSRHRLRLRLRLRYLVVALGYHKKAYGFSAPKDDQVVTAVYQEAIALACKTPKKTVKSR 60

QY 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTBDAKGYRCEVSAPSEQON 120

DB 61 LEWKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTBDAKGYRCEVSAPSEQON 120

QY 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVLRCDKEGKGNPAPEYTFWFKDGIRLLENPR 180

DB 121 LEEDTTLVLVAPVPSCEVPSSALSGTVVLRCDKEGKGNPAPEYTFWFKDGIRLLENPR 180

QY 181 LGSOSTNSSYTMNTKTGTLQENTVSKLDTGYSCEARNVSGYRRCPCGKRMQVDDNLNLSGI 240

DB 181 LGSOSTNSSYTMNTKTGTLQENTVSKLDTGYSCEARNVSGYRRCPCGKRMQVDDNLNLSGI 240

QY 241 IAAVVVALVSVCGLVGVCYVAQRKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298

DB 241 IAAVVVALVSVCGLVGVCYVAQRKGYSKETSFKQSNSSSKATTMSNDPFKHTKSFII 298

RESULT 5

ABU64994

ID ABU64994 standard; Protein; 298 AA.

XX ABU64994;

DT 15-MAY-2003 (first entry)

XX Human secreted protein gene 25, protein.

DE XX Secreted protein; immunodeficiency; multiple sclerosis;
 KW severe combined immunodeficiency; autoimmune disorder; cancer;
 KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;
 KW inflammatory condition; septic shock; inflammatory bowel disease;
 KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;
 KW gastrointestinal disorder; central nervous system disorder;
 KW ischaemic brain injury; neurodegenerative disorder; Parkinson's
 KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;
 KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;
 KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;
 KW endocrine disorder; liver disease; reproductive system disorder;
 KW endometriosis; infectious disease; pancreatic disorder; vaccine;
 KW wound repair; angiodysplasia; lymphatic disorder; hair loss; body weight;
 KW body height; hair colour; human.

OS Homo sapiens.

XX US2002172994-A1.

XX 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.

XX 14-MAR-1997; 97US-040710P.

PR 14-MAR-1997; 97US-040762P.

PR 30-MAY-1997; 97US-048100P.

PR 30-MAY-1997; 97US-048189P.

PR 30-MAY-1997; 97US-048357P.

PR 30-MAY-1997; 97US-050934P.
PR 06-JUN-1997; 97US-048970P.
PR 03-SEP-1997; 97US-057765P.
PR 19-DEC-1997; 97US-068368P.
PR 02-FEB-2001; 2001US-265583P.
PR 12-MAR-1998; 98MO-US04858.
PR 11-SEP-1998; 98US-0152060.
XX
XX (RUBE/) RUBEN S M.
PA (ROSE/) ROSEN S A.
PA (LIYY/) LI Y.
PA (ZENG/) ZENG Z.
PA (KYAW/) KYAW H.
PA (FISC/) FISCHER C L.
PA (LIHH/) LI H.
PA (SOPET/) SOPPET D R.
PA (GENT/) GENTZ R L.
PA (WEIY/) WEI Y.
PA (MOOR/) MOORE P A.
PA (YOUN/) YOUNG P E.
PA (GREE/) GREENE J M.
PA (FERR/) FERRIE A M.
XX
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX
XX WPI: 2003-310989/30.
DR N-PSDB; ABX96990.
XX
XX New human secreted polypeptides and polynucleotides for diagnosing,
PT prognosing, preventing and treating immune, hyperproliferative, liver,
PT kidney, reproductive disorders and for identifying modulators of
PT therapeutic use -
XX
XX Claim 11; Page 186; 209pp; English.
XX
XX The invention relates to an isolated polypeptide comprising an amino acid
CC sequence at least 95% identical to sequence of 28 human secreted
CC proteins, their fragment, polypeptide domain, epitope, secreted form,
CC variant, allelic variant, or species homologue, or the encoded sequence
CC included in ATCC 97921 and 97922. Also included are the encoding
CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
CC The proteins and nucleic acids are useful for diagnosing, preventing,
CC treating, prognosing or ameliorating a medical condition e.g.
CC immunodeficiencies (e.g. X-linked agammaglobulinaemia, B cell
CC immunodeficiencies, severe combined immunodeficiencies), autoimmune
CC disorders (e.g. systemic erythematosis, rheumatoid arthritis, multiple
CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
CC haematopoietic disorders, inflammatory conditions (e.g. septic shock,
CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
CC disorders, cancers (e.g. gastric, ovarian, lung, bladder, liver and
CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
CC injury and/or stroke, traumatic brain injury), neurodegenerative
CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
CC dementia, and prion disease), cardiovascular disorders (e.g.
CC atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis, dermatitis, allogeneic transplant rejection),
CC blood-related disorders (thrombosis, arterial thrombosis),
CC hyperproliferative disorders, renal disorders (e.g. acute
CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
CC hyperthyroidism, hyperparathyroidism), liver diseases and disorders,
CC reproductive system disorders (e.g. endometriosis), infectious diseases,
CC and pancreatic disorders. Many other diseases and disorders are listed in
CC the specification. They also useful as a vaccine adjuvant. Further they
CC are useful to enhance or inhibit complement mediated cell lysis, for
CC stimulating wound and tissue repair, angiogenesis, and the repair of
CC vascular or lymphatic diseases or disorders. They are also useful
CC to prevent hair loss, to modulate mammalian characteristics such as body
CC height, weight, hair colour, and to increase or decrease storage

CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
CC minerals, cofactors or other nutritional components. The proteins are
CC also useful for identifying binding partners. The present sequence
CC represents a secreted protein of the invention.
XX
SQ Sequence 298 AA;
Query Match 99.3%; Score 296; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-273;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARRSRRLRLRLRLRLVVALGYHKGAFSAPKDDQVVTAVYQEAIALACKTPKKTVKSR 60
DB 1 MARRSRRLRLRLRLRLVVALGYHKGAFSAPKDDQVVTAVYQEAIALACKTPKKTVKSR 60
QY 61 LEWKLGSRVSFVYYQQTLOGDFNRAEMIDFNIRIKNVTRSDAGKRCVPSAPSEQON 120
DB 61 LEWKLGSRVSFVYYQQTLOGDFNRAEMIDFNIRIKNVTRSDAGKRCVPSAPSEQON 120
QY 121 LEEDTTLVLELVAPAVPSCVPSSALSGTVVLELRCQKGNPAPEYTFWFKDGLRLLENPR 180
DB 121 LEEDTTLVLELVAPAVPSCVPSSALSGTVVLELRCQKGNPAPEYTFWFKDGLRLLENPR 180
QY 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCARNVGYRRCPGKRMQVDDLNISGI 240
DB 181 LGSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCARNVGYRRCPGKRMQVDDLNISGI 240
QY 241 IAAVVVALVISVGLGVCYVQAKGKGFYSKETSFKNSNSSKATMTSENDFPKTKSFII 298
DB 241 IAAVVVALVISVGLGVCYVQAKGKGFYSKETSFKNSNSSKATMTSENDFPKTKSFII 298
RESULT 6
ABR00172
ID ABR00172 standard; Protein; 298 AA.
XX
XX ABR00172;
XX
XX 03-APR-2003 (first entry)
XX
XX Human gene 162 encoded secreted protein HTEEB42, SEQ ID NO:461.
XX
XX Human; secreted protein; digestive disorder; gastrointestinal disorder;
XX mouth; oesophagus; stomach; small intestine; large intestine; liver;
XX biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
XX immune disorder; inflammation; infection; wound healing; drug screening;
XX chromosome identification; chromosome mapping; cytostatic; gene therapy;
XX antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.
XX
XX Homo sapiens.
XX
XX WO200276488-A1.
XX
XX 03-OCT-2002.
XX
XX 19-MAR-2002; 2002WO-US08276.
XX
XX 21-MAR-2001; 2001US-277340P.
XX
XX 19-JUL-2001; 2001US-306171P.
XX
XX 13-NOV-2001; 2001US-331287P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Rosen CA, Ruben SM;
XX
XX WPI: 2003-029900/02.
XX
XX N-PSDB; AB271351.
XX
XX New human secreted proteins and nucleic acids, useful for detecting,
XX preventing, diagnosing, prognosticating, treating and/or ameliorating
XX e.g. gastrointestinal diseases and disorders, or cancers -
XX
XX Claim 13; Page 1046-1047; 1216pp; English.

FT Peptide 1..20 /note= "Possible signal peptide #1"

FT Peptide 1..28 /note= "Possible signal peptide #2"

FT Protein 21..238 /note= "Possible mature JAM2 #1"

FT Protein 29..298 /note= "Possible mature JAM2 #2"

FT Domain 237..254 /note= "Transmembrane domain"

XX WO200114404-A1.

PN 01-MAR-2001.

XX 23-AUG-2000; 2000WO-US23158.

XX 24-AUG-1999; 99US-0150459.

PR (TEXA-) TEXAS BIOTECHNOLOGY CORP.

XX Cunnigham S, Trindad Arrate Barros M;

XX WPI; 2001-218425/22.

DR N-PSDB; AAS00512.

XX Novel nucleic acids encoding human junctional adhesion protein useful for producing antibodies that are suitable for therapeutic purposes -

XX Claim 4; Page 46-47; 51pp; English.

XX The sequence represents a human junctional adhesion molecule 2 (JAM2). The polynucleotide encoding the polypeptide is useful for recombinant production of JAM-2 protein, which in turn is useful for the production of antibodies. The antibodies may be used for probing cellular localisation and/or expression of JAM2 in tissues under normal and disease states, for immunoprecipitating JAM2 protein from cells and/or stroke tissues to determine whether it is modified by glycosylation and phosphorylation, and for determining JAM2 function. The antibodies inhibit interaction of JAM2 with inflammatory cells or influences their paracellular migration, and is therefore useful for alleviating inflammatory diseases such as arthritis, asthma, rheumatoid arthritis, inflammatory bowel disease and Crohn's disease.

XX SQ Sequence 298 AA;

Query Match 80.5%; Score 240; DB 22; Length 298;

Best Local Similarity 100.0%; Pred. No. 5.2e-220;

Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKGLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEOG 118

Db 59 SRLEWKGLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEOG 118

QY 119 QNLEEDTTLVLLVAPVPSCEVPVSALSGTVVLRCDKQEGNPAPEYTFWKGIRLLEN 178

Db 119 QNLEEDTTLVLLVAPVPSCEVPVSALSGTVVLRCDKQEGNPAPEYTFWKGIRLLEN 178

QY 179 PRLGQSTNSSTYMTKTGTLQNTVSKLDTGEYSCEARNVGYRCPKRMQVDDNLIS 238

Db 179 PRLGQSTNSSTYMTKTGTLQNTVSKLDTGEYSCEARNVGYRCPKRMQVDDNLIS 238

QY 239 GIIAAVVVVVALVISVGLGVCAQKGYFSKETSFOKNSSSKATMTSENDFKHTKSFII 298

Db 239 GIIAAVVVVVALVISVGLGVCAQKGYFSKETSFOKNSSSKATMTSENDFKHTKSFII 298

RESULT 9

ID ABP61801

XX ABP61801 standard; Protein; 298 AA.

AC ABP61801;

XX

DT 04-OCT-2002 (first entry)

XX Human polypeptide SEQ ID NO 155.

DE

XX Human; cytostatic; antirheumatic; antiarthritic; vulnery; analgesic; antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian; neuroprotective; nootropic; osteopathic; haemostatic; vasotropic; antiulcer; fungicide; antidiabetic; antiasthmatic; antiallergic; immunostimulant; antiparasitic; secreted protein; transmembrane protein; cytokine; cell proliferation; cell differentiation; autoimmune disease; stem cell; growth factor; nervous system disease; neuropathy; Alzheimer's disease; Parkinson's disease; Huntington's disease; osteoporosis; severe combined immunodeficiency; SCID; infection; multiple sclerosis; rheumatoid arthritis; gene therapy.

XX Homo sapiens.

OS

XX US2002065394-A1.

PN 30-MAY-2002.

XX 22-DEC-2000; 2000US-0745763.

PF

XX 18-MAR-1998; 98US-0040963.

PR (JACO/) JACOBS K.

XX (MCCO/) MCCOY J M.

PA (LAVA/) LAVALLIE E R.

PA (COLL/) COLLINS-RACIE L A.

PA (EVAN/) EVANS C.

PA (MERB/) MERBERG D.

PA (TREA/) TREACY M.

XX (SPAU/) SPAULDING V.

XX Jacobs K, McCoy JM, LaVallie ER, Collins-Racie LA, Evans C; Merberg D, Treacy M, Spaulding V;

PI WPI; 2002-582343/62.

XX N-PSDB; ABQ92017.

DR Novel secreted or transmembrane protein and polynucleotide encoding the protein, useful for diagnosis and treatment of neurological disorders, cancer, autoimmune diseases, bone disorders and lung or liver fibrosis

XX

PS Claim 54; Page 116-117; 284pp; English.

XX The invention relates to human secreted or transmembrane protein (I), their fragments and is encoded by specific complementary deoxyribonucleic acid (cDNA) inserts (II), where the protein is substantially free from other mammalian proteins. (I) are useful for preventing, treating or ameliorating a medical condition, especially immunological treatment or prevention of tumours. (I) exhibits activity relating to angiogenesis, cytokine, cell proliferation, cell differentiation, antiinflammatory, stem cell growth factor activity and activin or inhibin-related activities. (I) can be used to manipulate stem cells in culture to give rise to neuroepithelial cells that can be used to augment or replace cells damaged by illness, autoimmune disease, accidental damage or genetic disorders. (I) induces the proliferation of neural cells and regeneration of nerve and brain tissue and is useful for the treatment of central and peripheral nervous system diseases and neuropathies, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis. (I) is involved in chemotactic or chemokinetic activity, regulation of haematopoiesis and is useful for treating myeloid or lymphoid cell disorders, platelet disorders such as thrombocytopenia and for regeneration of bone, cartilage, tendon, ligament and/or nerve tissue growth and in tissue repair, healing of burns, incisions, ulcers, for treating osteoporosis, osteoarthritis, bone degenerative disorders or periodontal disease. (I) is also useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, various immune deficiencies and disorders including severe combined immunodeficiency (SCID), bacterial or fungal infections, autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,

PA (GETH) GENENTECH INC.
 XX Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;
 PI WPI; 1999-229499/19.
 XX N-PSDB; AAX37664.
 DR
 XX Composition containing novel polypeptide PRO245, its agonist or
 PT antagonist -
 XX
 PS Example 1; Fig 2; 177pp; English.
 XX
 CC This invention describes a novel composition containing (apart from a
 CC carrier or excipient), a novel PRO245 polypeptide (I), its agonist or
 CC antagonist, or their fragments, for modulating: (i) infiltration of
 CC inflammatory cells into tissue; (ii) an immune response; or (iii) T cell
 CC proliferation. The composition increases or decreases any of the effects
 CC (i)-(iii). The products of the invention have anti-inflammatory,
 CC anti-autoimmune and anti-diabetic activity. (I), and its (ant)agonists
 CC and their fragments, are used to treat immune-related diseases,
 CC particularly T cell-mediated diseases. The diseases treated include
 CC systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 CC arthritis, spondyloarthropathies, systemic sclerosis (scleroderma),
 CC idiopathic inflammatory myopathies (dermatomyositis, polymyositis),
 CC Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune
 CC hemolytic anemia (immune pancytopenia, paroxysmal nocturnal
 CC hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenic
 CC purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease,
 CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 CC thyroiditis), diabetes mellitus, immune-mediated renal disease
 CC (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis,
 CC idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic
 CC inflammatory demyelinating polyneuropathy, infectious hepatitis
 CC (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune
 CC chronic active hepatitis, primary biliary cirrhosis, granulomatous
 CC hepatitis, and sclerosing cholangitis, inflammatory bowel disease
 CC (ulcerative colitis; Crohn's disease), gluten-sensitive enteropathy, and
 CC Whipple's disease. Autoimmune or immune-mediated skin diseases including
 CC bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis,
 CC asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity,
 CC urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis,
 CC hypersensitivity pneumonitis, and transplantation associated diseases
 CC (graft rejection, and graft-versus-host-disease). (I), its (ant)agonists
 CC or fragment can also be used as an adjuvant in treatment of tumors.
 CC Antibodies against (I) can also be used for diagnosing such diseases.
 CC This sequence represents the human PRO245 protein described in the
 CC invention.
 XX
 SQ Sequence 312 AA;
 Query Match 77.2%; Score 230; DB 20; Length 312;
 Best Local Similarity 100.0%; Pred. No. 1.8e-210;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLWKKLGRSVFVYQQTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
 Db |||||
 59 SRLWKKLGRSVFVYQQTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
 QY 119 QNLEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTFKDGIRLLEN 178
 Db |||||
 119 QNLEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTFKDGIRLLEN 178
 QY 179 PRLGQSSTNSSTYMTNTKTGTLQFNTVSKLTGTGYSCEARNVGYRRCPCGRMVDLLNIS 238
 Db |||||
 179 PRLGQSSTNSSTYMTNTKTGTLQFNTVSKLTGTGYSCEARNVGYRRCPCGRMVDLLNIS 238
 QY 239 GIIAAVVVALVLSVGLGVCAQRKGYSFKETSFKQNSSSSKATTMSN 288
 Db |||||
 239 GIIAAVVVALVLSVGLGVCAQRKGYSFKETSFKQNSSSSKATTMSN 288
 RESULT 12
 AAY23324

AA23324 standard; Protein; 312 AA.
 AAY23324;
 02-SEP-1999 (first entry)
 A33 related antigen PRO245.
 A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease;
 tumour.
 Homo sapiens.
 WO9527098-A2.
 03-JUN-1999.
 20-NOV-1998; 98WO-US24855.
 17-SEP-1998; 98WO-US19437.
 21-NOV-1997; 97US-0066364.
 20-MAR-1998; 98US-0078936.
 (GETH) GENENTECH INC.
 Ashkenazi A, Fong S, Goddard A, Gurney AL, Napier MA;
 Tumas D, Wood WI;
 WPI; 1999-404743/34.
 N-PSDB; AAX81770.
 Antigens PRO301, PRO362 and PRO245 related to A33
 Example 3; Fig 11; 122pp; English.
 The specification describes A33 related antigens PRO301, PRO362 and
 PRO245. The methods and compositions of the invention are useful for the
 treatment and diagnosis of inflammatory disease and tumours in mammals.
 Such inflammatory diseases include of inflammatory bowel disease,
 systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 arthritis, spondyloarthropathies, systemic sclerosis, scleroderma,
 idiopathic inflammatory myopathies, dermatomyositis, polymyositis,
 Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune
 anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,
 autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura,
 immune-mediated thrombocytopenia, thyroiditis, Grave's disease,
 Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 thyroiditis, diabetes mellitus, immune-mediated renal disease,
 glomerulonephritis, tubulointerstitial nephritis, demyelinating diseases
 of the central and peripheral nervous systems such as multiple sclerosis,
 idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis,
 A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active
 hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing
 cholangitis, inflammatory and fibrotic lung diseases, gluten-sensitive
 enteropathy, Whipple's disease, autoimmune or immune-mediated skin
 diseases allergic diseases of the lung such as eosinophilic pneumonias,
 idiopathic pulmonary fibrosis and hypersensitivity pneumonitis
 transplantation associated diseases disease. The present sequence
 represents PRO245.
 Query Match 77.2%; Score 230; DB 20; Length 312;
 Best Local Similarity 100.0%; Pred. No. 1.8e-210;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 59 SRLWKKLGRSVFVYQQTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
 Db |||||
 59 SRLWKKLGRSVFVYQQTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
 QY 119 QNLEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTFKDGIRLLEN 178
 Db |||||
 119 QNLEEDTVTLEVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTFKDGIRLLEN 178

QY 179 PRLGSGSTNSSVTMTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMVDLNLIS 238
DB 179 PRLGSGSTNSSVTMTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMVDLNLIS 238
QY 239 GIITAAVVVALVISVGLGVCVCAQRKGYSKETSFKQNSSSSKATTMSN 288
DB 239 GIITAAVVVALVISVGLGVCVCAQRKGYSKETSFKQNSSSSKATTMSN 288
RESULT 13
ID AAY13354
AC AAY13354 standard; Protein; 312 AA.
XX AAY13354;
XX 25-JUN-1999 (first entry)
XX Amino acid sequence of protein PRO245.
XX Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
XX Homo sapiens.
XX WO9914328-A2.
XX 25-MAR-1999.
XX 16-SEP-1998; 98WO-US19330.
XX 25-NOV-1997; 97US-006840.
PR 17-SEP-1997; 97US-0059113.
PR 17-SEP-1997; 97US-0059115.
PR 17-SEP-1997; 97US-0059117.
PR 17-SEP-1997; 97US-0059119.
PR 17-SEP-1997; 97US-0059121.
PR 17-SEP-1997; 97US-0059122.
PR 17-SEP-1997; 97US-0059184.
PR 18-SEP-1997; 97US-0059263.
PR 18-SEP-1997; 97US-0059266.
PR 15-OCT-1997; 97US-0062125.
PR 17-OCT-1997; 97US-0062285.
PR 17-OCT-1997; 97US-0062287.
PR 21-OCT-1997; 97US-0063486.
PR 24-OCT-1997; 97US-0062814.
PR 24-OCT-1997; 97US-0062816.
PR 24-OCT-1997; 97US-0063045.
PR 24-OCT-1997; 97US-0063120.
PR 24-OCT-1997; 97US-0063121.
PR 24-OCT-1997; 97US-0063127.
PR 24-OCT-1997; 97US-0063128.
PR 27-OCT-1997; 97US-0063329.
PR 27-OCT-1997; 97US-0063327.
PR 28-OCT-1997; 97US-0063541.
PR 28-OCT-1997; 97US-0063542.
PR 28-OCT-1997; 97US-0063544.
PR 28-OCT-1997; 97US-0063549.
PR 28-OCT-1997; 97US-0063550.
PR 28-OCT-1997; 97US-0063564.
PR 29-OCT-1997; 97US-0063435.
PR 29-OCT-1997; 97US-0063704.
PR 29-OCT-1997; 97US-0063732.
PR 29-OCT-1997; 97US-0063738.
PR 29-OCT-1997; 97US-0063734.
PR 29-OCT-1997; 97US-0064215.
PR 29-OCT-1997; 97US-0063735.
PR 31-OCT-1997; 97US-0063870.

PR 31-OCT-1997; 97US-0064103.
PR 03-NOV-1997; 97US-0064248.
PR 07-NOV-1997; 97US-0064809.
PR 12-NOV-1997; 97US-0065186.
PR 17-NOV-1997; 97US-0065846.
PR 18-NOV-1997; 97US-0065693.
PR 21-NOV-1997; 97US-0066120.
PR 21-NOV-1997; 97US-0066364.
PR 24-NOV-1997; 97US-0066772.
PR 24-NOV-1997; 97US-0066466.
PR 24-NOV-1997; 97US-0066770.
PR 24-NOV-1997; 97US-0066511.
PR 24-NOV-1997; 97US-0066453.
XX (GETH) GENENTECH INC.
XX Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
XX WPI; 1999-229533/19.
XX N-PSDB; AAX52225.
XX New isolated human genes and polypeptides used in, e.g. treatment of
XX gastrointestinal ulceration
XX Claim 12; Fig 24; 320pp; English.
XX AAY13344-403 represent secreted and transmembrane human proteins.
XX The cDNA sequences are obtained from cDNA libraries, prepared from
XX fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
XX The encoded polypeptides have specific uses based on their homology to
XX known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
XX associated with the preservation and maintenance of gastrointestinal
XX mucosa and the repair of acute and chronic mucosal lesions
XX (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
XX ulceration and congenital microvillus atrophy), skin diseases associated
XX with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
XX cancers such as lung squamous cell carcinoma of the vulva and gliomas),
XX potent effects on cell growth and development, diseases related to
XX growth or survival of nerve cells including Parkinson's disease,
XX Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used
XX as a target for anti-tumor drugs. PRO533 may be used in the treatment
XX of Usher Syndrome or Atrophia areata. PRO269 can be used as an
XX anti-thrombotic agent; PRO287 polypeptides and portions may have
XX therapeutic applications in wound healing and tissue repair; PRO317 can
XX be used for treating problems of the kidney, uterus, endometrium, blood
XX vessels, or related tissue, e.g. in the heart of genital tract.
XX SQ Sequence 312 AA;
Query Match 77.2%; Score 230; DB 20; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKKLGRSVSFVYVYQOTLQGDFFKNRAEMIDFNIRKNVTRSDAGKYCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVSFVYVYQOTLQGDFFKNRAEMIDFNIRKNVTRSDAGKYCEVSAPSEQ 118
QY 119 QNLEEDTTLLEVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIIRLEN 178
DB 119 QNLEEDTTLLEVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIIRLEN 178
QY 179 PRLGSGSTNSSVTMTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMVDLNLIS 238
DB 179 PRLGSGSTNSSVTMTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRMVDLNLIS 238
QY 239 GIITAAVVVALVISVGLGVCVCAQRKGYSKETSFKQNSSSSKATTMSN 288
DB 239 GIITAAVVVALVISVGLGVCVCAQRKGYSKETSFKQNSSSSKATTMSN 288
RESULT 14
AAB33421

ID AAB33421 standard; Protein; 312 AA.
XX AAB33421;
AC
XX
DT 29-JAN-2001 (first entry)
DE
DE Human PRO245 protein UNQ219 SEQ ID NO:36.
XX
XX Human; immune related disease; diagnosis; antiinflammatory; cardiant;
KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
KW haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
KW antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic;
KW antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis;
KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
KW autoimmune thrombocytopenia; immune-mediated renal disease;
KW demyelinating disease; hepatobiliary disease; Whipple's disease;
KW inflammatory bowel disease; gluten-sensitive enteropathy;
KW autoimmune disease; immune-mediated skin disease; allergic disease;
KW immunological disease; transplantaton associated disease;
KW graft rejection; graft-versus-host-disease.
XX
OS Homo sapiens.
XX
PN WO200053758-A2.
XX
PD 14-SEP-2000.
XX
XX 02-MAR-2000; 2000WO-US05841.
PF
XX 08-MAR-1999; 99WO-US05028.
PR 10-MAR-1999; 99US-0123618.
PR 12-MAR-1999; 99US-0123957.
PR 23-MAR-1999; 99US-0125775.
PR 12-APR-1999; 99US-0128849.
PR 28-APR-1999; 99WO-US08615.
PR 04-MAY-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0132371.
PR 02-JUN-1999; 99US-0134287.
PR 23-JUN-1999; 99WO-US12252.
PR 20-JUL-1999; 99US-0141037.
PR 26-JUL-1999; 99US-0144758.
PR 28-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99US-0146222.
PR 08-SEP-1999; 99WO-US20111.
PR 15-SEP-1999; 99WO-US20594.
PR 29-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 05-OCT-1999; 99WO-US21547.
PR 29-OCT-1999; 99US-0162506.
PR 29-NOV-1999; 99WO-US28214.
PR 30-NOV-1999; 99WO-US28313.
PR 01-DEC-1999; 99WO-US28409.
PR 01-DEC-1999; 99WO-US28634.
PR 02-DEC-1999; 99WO-US28551.
PR 02-DEC-1999; 99WO-US28564.
PR 16-DEC-1999; 99WO-US28565.
PR 20-DEC-1999; 99WO-US30095.
PR 30-DEC-1999; 99WO-US31274.
PR 05-JAN-2000; 2000WO-US00219.
PR 06-JAN-2000; 2000WO-US00277.
PR 11-FEB-2000; 2000WO-US03565.
PR 18-FEB-2000; 2000WO-US04341.
PR 18-FEB-2000; 2000WO-US04342.
PR 22-FEB-2000; 2000WO-US04414.
PA (GETH) GENENTECH INC.
XX

PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
PI Kabakoff RC, Lu Y, Fan J, Pennica D, Shelton DL, Smith V;
XX Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
DR WPI; 2000-572271/53.
DR N-PSDB; AAC58586.
XX
XX Sixty four PRO polypeptides, useful in the diagnosis and treatment of
PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
XX
XX Claim 33; Fig 16; 309pp; English.
XX
CC The present invention describes sixty four human PRO proteins which can
CC be used in the treatment of immune related diseases. The human PRO
CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
CC treating and diagnosing immune related disorders. The disorders are
CC selected from systemic lupus erythematosus, rheumatoid arthritis,
CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
CC anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus,
CC immune-mediated renal disease, demyelinating diseases of the central
CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
CC autoimmune or immune-mediated skin diseases, allergic diseases,
CC immunological diseases of the lung, and transplantation associated
CC diseases including graft rejection and graft-versus-host-disease.
CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
CC sequences given in the exemplification of the present invention.
XX
SQ Sequence 312 AA;
Query Match 77.2%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKKLGRSVFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
DB 59 SRLEWKKLGRSVFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTVTLVLVAPAPVSCVPSALSALSGTVVLCQDKGPNAPETWFKDGIRLLEN 178
DB 119 QNLEEDTVTLVLVAPAPVSCVPSALSALSGTVVLCQDKGPNAPETWFKDGIRLLEN 178
QY 179 PRIGSOSTNSSYTMNTKTGTLOFNTVSKLTGCEARNVSGYRRCPCGRMQVDDLNIS 238
DB 179 PRIGSOSTNSSYTMNTKTGTLOFNTVSKLTGCEARNVSGYRRCPCGRMQVDDLNIS 238
QY 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288
DB 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288
RESULT 15
AAB24401
ID AAB24401 standard; Protein; 312 AA.
XX
XX AAB24401;
AC
XX
XX 07-NOV-2000 (first entry)
DT
XX Human PRO245 protein sequence SEQ ID NO:67.
DE
XX Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
KW cytostatic; gene therapy; vaccine.
XX
OS Homo sapiens.
XX

PN WO200032221-A2.
XX 08-JUN-2000.
PD
XX
PF 30-NOV-1999; 99WO-US28313.
XX
XX 01-DEC-1998; 98WO-US25108.
XX 16-DEC-1998; 98US-0112850.
PR 12-JAN-1999; 99US-0115554.
PR 08-MAR-1999; 99WO-US05028.
PR 12-MAR-1999; 99US-0123957.
PR 28-APR-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0134287.
PR 02-JUN-1999; 99WO-US12252.
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99WO-US20111.
PR 08-SEP-1999; 99WO-US20594.
PR 13-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 15-SEP-1999; 99WO-US21547.
PR 05-OCT-1999; 99WO-US23089.
PR 29-OCT-1999; 99US-0162506.
XX
PA (GETH) GENENTECH INC.
XX
XX Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;
PI Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;
PI Watanabe CK, Williams PM, Wood WI;
XX
DR WPI; 2000-412154/35.
DR N-PSDB; AAA77562.
XX
XX Nucleic acids encoding PRO polypeptides useful for preventing,
PT diagnosing and treating atherosclerosis, endothelial or
PT angiogenic disorders in mammals -
XX
XX Claim 72; Fig 28; 315pp; English.
XX
XX The present invention describes nucleic acids encoding PRO polypeptides
CC useful for preventing, diagnosing and treating atherosclerosis, endothelial or
CC cardiovascular, endothelial or angiogenic disorder in mammals by
CC modulating cell proliferation, angiogenesis and cardiovascularisation,
CC and for identifying agonists and antagonists of these processes. The
CC nucleic acids and the proteins they encode may be used in the
CC prevention, treatment and diagnosis of diseases associated with
CC inappropriate PRO expression such as cardiovascular, endothelial or
CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and
CC cardiac hypertrophy). For example, the nucleic acids (NCs) and vectors
CC containing them and the PRO polypeptide may be used to treat disorders
CC associated with decreased PRO expression. AAA77510 to AAA77721 and
CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in
CC the exemplification of the present invention.
XX
XX Sequence 312 AA;
SQ

Query Match 77.2%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 1.8e-210;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
59 SRLEWKKLGRSVFVYQQTQLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
59 SRLEWKKLGRSVFVYQQTQLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
119 QNLEEDVTLEVLVAPVSCPSSALSGTVVELRCQEGNPAPETWFKDGIRLLEN 178
119 QNLEEDVTLEVLVAPVSCPSSALSGTVVELRCQEGNPAPETWFKDGIRLLEN 178
179 PRLGQSNTSSYTMNTKTGTQFNTVSKLDTGEYSCEARNVGYRCRPGKRMQVDDLNIS 238
179 PRLGQSNTSSYTMNTKTGTQFNTVSKLDTGEYSCEARNVGYRCRPGKRMQVDDLNIS 238

Qy 239 GTTAAVVVVVALVISVCGLVGVCYAORKGYFSKETSFOKSNSSSKATTWSEN 288
Db 239 GTTAAVVVVVALVISVCGLVGVCYAORKGYFSKETSFOKSNSSSKATTWSEN 288

Search completed: December 9, 2003, 17:23:29
Job time : 40.4564 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:22:07 ; Search time 15.0557 Seconds
(without alignments)
837.463 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRHRLLLRLVLA.....SSKATTMSNDFKHTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 328717 seqs, 42310858 residues

Word size : 50

Total number of hits satisfying chosen parameters: 2

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : Issued Patents AA:
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2: /cgn2_6/ptodata/1/iaa/5B COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PCTUS COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	296	99.3	298	4	US-09-152-060-76
2	230	77.2	312	4	US-09-254-465A-9

ALIGNMENTS

RESULT 1
US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003PL.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; CURRENT FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30

; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,368
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

Query Match 99.3%; Score 296; DB 4; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.9e-276;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MARRSRHRLLLRLVLA...GKAYGFSAPKQDQVAVYQEAAILACKTPKTVKSR 60
DB 1 MARRSRHRLLLRLVLA...GKAYGFSAPKQDQVAVYQEAAILACKTPKTVKSR 60
QY 61 LEWKLGSRVSFVYQQTLOGDPKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
DB 61 LEWKLGSRVSFVYQQTLOGDPKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQN 120
QY 121 LEEDTVTLVLVAPVPSCEVSSALSGTVVELRCODKEGNPAPEYTFWKDGIRLLENPR 180
DB 121 LEEDTVTLVLVAPVPSCEVSSALSGTVVELRCODKEGNPAPEYTFWKDGIRLLENPR 180
QY 181 LGSQSTNSSYTWNTKTGLQFNTVSKLDTGEYSCEARNVGYRRCPCRMQVDDLNISGI 240
DB 181 LGSQSTNSSYTWNTKTGLQFNTVSKLDTGEYSCEARNVGYRRCPCRMQVDDLNISGI 240
QY 241 IAAVVVALVISVCGLGVCYAQRKGYFSKETSFKQSNSSSKATMTSENDFKHTKSFII 298
DB 241 IAAVVVALVISVCGLGVCYAQRKGYFSKETSFKQSNSSSKATMTSENDFKHTKSFII 298

RESULT 2
US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; FILE REFERENCE: P1216R1 (US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21

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; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Query Match      77.2%; Score 230; DB 4; Length 312;
Best Local Similarity 100.0%; Pred.No. 1.7e-212;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Job time : 15.0557 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:25:18 ; Search time 27.5157 Seconds
(without alignments)
2014.238 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARRSRHRLLLRLVVA.....SSKATTMSNDPKTKTSFII 298

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Gapop 60.0 , Gapext 60.0

Searched: 684280 seqs, 185983659 residues

Word size: 50

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Post-processing: Listing first 45 summaries

Database : Published Applications AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	296	99.3	298	9	US-09-852-659A-76
3	296	99.3	298	10	US-09-852-797-76
4	240	80.5	298	9	US-09-745-763-38
5	240	80.5	298	9	US-09-799-777-30
6	240	80.5	298	15	US-10-139-849-2
7	240	80.5	298	16	US-10-192-791-2
8	230	77.2	312	10	US-09-909-320-64
9	230	77.2	312	10	US-09-909-088B-64
10	230	77.2	312	10	US-09-905-291A-64
11	230	77.2	312	10	US-09-953-499-9
12	230	77.2	312	10	US-09-902-853-64
13	230	77.2	312	10	US-09-907-824-64
14	230	77.2	312	10	US-09-907-841-64
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16	230	77.2	312	11	US-09-906-742-64	Sequence 64, Appl
17	230	77.2	312	11	US-09-906-838-64	Sequence 64, Appl
18	230	77.2	312	11	US-09-907-613-64	Sequence 64, Appl
19	230	77.2	312	11	US-09-907-942-64	Sequence 64, Appl
20	230	77.2	312	11	US-09-904-859-64	Sequence 64, Appl
21	230	77.2	312	11	US-09-909-204-64	Sequence 64, Appl
22	230	77.2	312	11	US-09-904-820-64	Sequence 64, Appl
23	230	77.2	312	11	US-09-904-786-64	Sequence 64, Appl
24	230	77.2	312	11	US-09-906-646-64	Sequence 64, Appl
25	230	77.2	312	11	US-09-906-700-64	Sequence 64, Appl
26	230	77.2	312	11	US-09-903-786-64	Sequence 64, Appl
27	230	77.2	312	11	US-09-902-903-64	Sequence 64, Appl
28	230	77.2	312	11	US-09-903-749A-64	Sequence 64, Appl
29	230	77.2	312	11	US-09-904-119-64	Sequence 64, Appl
30	230	77.2	312	11	US-09-904-956-64	Sequence 64, Appl
31	230	77.2	312	11	US-09-902-736-64	Sequence 64, Appl
32	230	77.2	312	11	US-09-907-794-64	Sequence 64, Appl
33	230	77.2	312	11	US-09-903-943-64	Sequence 64, Appl
34	230	77.2	312	11	US-09-904-462-64	Sequence 64, Appl
35	230	77.2	312	11	US-09-907-925-64	Sequence 64, Appl
36	230	77.2	312	11	US-09-902-692-64	Sequence 64, Appl
37	230	77.2	312	11	US-09-903-520-64	Sequence 64, Appl
38	230	77.2	312	11	US-09-905-056-64	Sequence 64, Appl
39	230	77.2	312	11	US-09-909-064-64	Sequence 64, Appl
40	230	77.2	312	11	US-09-904-553-64	Sequence 64, Appl
41	230	77.2	312	11	US-09-905-381-64	Sequence 64, Appl
42	230	77.2	312	11	US-09-905-088-64	Sequence 64, Appl
43	230	77.2	312	11	US-09-907-575-64	Sequence 64, Appl
44	230	77.2	312	11	US-09-905-075-64	Sequence 64, Appl
45	230	77.2	312	11	US-09-902-759-64	Sequence 64, Appl

ALIGNMENTS

RESULT 1
US-09-853-161-76
; Sequence 76, Application US/09853161
; Patent No. US20020076756A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: PZ003P3
; CURRENT APPLICATION NUMBER: US/09/853,161
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298

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; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-853-161-76

Query Match          99.3%; Score 296; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-269;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 MARRSRRLRLRLRLRYLVVALGYHKA YGFSAPKQQVVAVXYQEA LACKTPKKT VYKSR 60
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Qy 121 LEEDTVTLVLVAPVPSCVPSSALSGTVVLRCDKEGNAPEYTFWFKDGIRLLENPR 180
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Db 121 LEEDTVTLVLVAPVPSCVPSSALSGTVVLRCDKEGNAPEYTFWFKDGIRLLENPR 180
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Qy 181 LGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDNLNLSGI 240
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Db 181 LGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCAARNVGYRRCPCGRMQVDDNLNLSGI 240
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Qy 241 IAAVVVVALVISVCGLGVCYVQAKRGYFSKETSFOKSNSSSKATTMSNDPFKHTKSFII 298
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Db 241 IAAVVVVALVISVCGLGVCYVQAKRGYFSKETSFOKSNSSSKATTMSNDPFKHTKSFII 298
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RESULT 2
US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US20020077287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P4
; CURRENT APPLICATION NUMBER: US/09/852,659A
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76

; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; US-09-852-797-76

Query Match          99.3%; Score 296; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 2.5e-269;
Matches 298; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 3
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; Sequence 76, Application US/09852797
; Patent No. US20020172994A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
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; TELEPHONE: (650) 855-0555
; TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 30:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 298 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: DUDNCT02
; CLONE: 1704050
; SEQUENCE DESCRIPTION: SEQ ID NO: 30 :
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Best Local Similarity 100.0%; Pred. No. 8.5e-217;
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RESULT 6

US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barrios, Maria Pia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rocket, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-616-5400
; TELEFAX: 312-616-5460
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:

; LENGTH: 298 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

Query Match 80.5%; Score 240; DB 15; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

Qy 179 PRLSQSTNSSTYTWNTKTGTLQFNTVSKLDTGEYSCARNVGVYRRCPCGKRMQVDDLNIS 238
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Qy 239 GI1AAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298
Db 239 GI1AAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 7

US-10-192-791-2
; Sequence 2, Application US/10192791
; Publication No. US20030130166A1
; GENERAL INFORMATION:
; APPLICANT: Texas Biotechnology Corporation
; TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
; FILE REFERENCE: TEX4542P0430
; CURRENT APPLICATION NUMBER: US/10/192,791
; CURRENT FILING DATE: 2003-12-10
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 2
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-192-791-2

Query Match 80.5%; Score 240; DB 16; Length 298;
Best Local Similarity 100.0%; Pred. No. 8.5e-217;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 59 SRLEWKKLGRSVSFVYYQOTLQGD FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

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Db 179 PRLSQSTNSSTYTWNTKTGTLQFNTVSKLDTGEYSCARNVGVYRRCPCGKRMQVDDLNIS 238

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Db 239 GI1AAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 8

US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.

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; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; CURRENT FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
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; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-320-64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2,1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; CURRENT FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
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; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-320-64

; Sequence 64, Application US/09909088B
; Patent No. US20020146709A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,088B
; CURRENT FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
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; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29

Qy 59 SRLEWKKGRSVFVYVYQOTLQGDGKRAEMIDFNIRIKNVTRSDACKYRCEVSAPSEQ 118
Db 59 SRLEWKKGRSVFVYVYQOTLQGDGKRAEMIDFNIRIKNVTRSDA GKYRCEVSAPSEQ 118
Qy 119 QNLEEDTVTLEVLVAPAVPSPSSSALSGTGVVELRCQDKEGNPAPEYTWFKDGI RLLEN 178
Db 119 QNLEEDTVTLEVLVAPAVPSPSSSALSGTGVVELRCQDKEGNPAPEYTWFKDGI RLLEN 178
Qy 179 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLTGTGYSCEARNVSGYRRCPGKRMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLTGTGYSCEARNVSGYRRCPGKRMQVDDLNIS 238
Qy 239 GIITAAVVVVVALVSVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSEN 288
Db 239 GIITAAVVVVVALVSVCGLVGYAQRKGYSFKTSFQKSNSSSKATTMSEN 288

RESULT 9
US-09-909-088B-64
; Sequence 64, Application US/09909088B
; Patent No. US20020146709A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,088B
; CURRENT FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
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; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
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;; PRIOR APPLICATION NUMBER: PCT/US99/28313
;; PRIOR FILING DATE: 1999-11-30
;; PRIOR APPLICATION NUMBER: PCT/US99/28564
;; PRIOR FILING DATE: 1999-12-02
;; PRIOR APPLICATION NUMBER: PCT/US99/28565
;; PRIOR FILING DATE: 1999-12-02
;; PRIOR APPLICATION NUMBER: PCT/US99/30095
;; PRIOR FILING DATE: 1999-12-16
;; PRIOR APPLICATION NUMBER: PCT/US99/30911
;; PRIOR FILING DATE: 1999-12-20
;; PRIOR APPLICATION NUMBER: PCT/US99/30999
;; PRIOR FILING DATE: 1999-12-20
;; PRIOR APPLICATION NUMBER: PCT/US00/00219
;; PRIOR FILING DATE: 2000-01-05
;; NUMBER OF SEQ ID NOS: 423
;; SEQ ID NO 64
;; LENGTH: 312
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
Db 59 SRLEWKKLGRSVSFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118

Qy 119 QNLEEDTTLVLVAPVAPSPCEVPSSALSGTVELRCODKEGNPAPEYTFWKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPSPCEVPSSALSGTVELRCODKEGNPAPEYTFWKDGIRLLEN 178

Qy 179 PRGQSSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCARNVGYRRCPCGKRMQVDDLNIS 238
Db 179 PRGQSSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCARNVGYRRCPCGKRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLVGCYVQAKRGYFSKETSFKQSNSSSKATTMSEN 288
Db 239 GIITAAVVVVALVISVCGLVGCYVQAKRGYFSKETSFKQSNSSSKATTMSEN 288

RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Geritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

;; TITLE OF INVENTION: Acids Encoding the Same
;; FILE REFERENCE: 10466-14
;; CURRENT APPLICATION NUMBER: US/09/905,291A
;; CURRENT FILING DATE: 2001-07-12
;; PRIOR APPLICATION NUMBER: PCT/US00/04414
;; PRIOR FILING DATE: 2000-02-22
;; PRIOR APPLICATION NUMBER: US 60/143,048
;; PRIOR FILING DATE: 1999-07-07
;; PRIOR APPLICATION NUMBER: US 60/145,698
;; PRIOR FILING DATE: 1999-07-26
;; PRIOR APPLICATION NUMBER: US 60/146,222
;; PRIOR FILING DATE: 1999-07-28
;; PRIOR APPLICATION NUMBER: PCT/US99/20594
;; PRIOR FILING DATE: 1999-09-08
;; PRIOR APPLICATION NUMBER: PCT/US99/20944
;; PRIOR FILING DATE: 1999-09-13
;; PRIOR APPLICATION NUMBER: PCT/US99/21090
;; PRIOR FILING DATE: 1999-09-15
;; PRIOR APPLICATION NUMBER: PCT/US99/21547
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;; PRIOR APPLICATION NUMBER: PCT/US99/23089
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;; PRIOR APPLICATION NUMBER: PCT/US99/28214
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;; PRIOR APPLICATION NUMBER: PCT/US99/28313
;; PRIOR FILING DATE: 1999-11-30
;; PRIOR APPLICATION NUMBER: PCT/US99/28564
;; PRIOR FILING DATE: 1999-12-02
;; PRIOR APPLICATION NUMBER: PCT/US99/28565
;; PRIOR FILING DATE: 1999-12-02
;; PRIOR APPLICATION NUMBER: PCT/US99/30911
;; PRIOR FILING DATE: 1999-12-20
;; PRIOR APPLICATION NUMBER: PCT/US99/30999
;; PRIOR FILING DATE: 1999-12-20
;; PRIOR APPLICATION NUMBER: PCT/US00/00219
;; PRIOR FILING DATE: 2000-01-05
;; NUMBER OF SEQ ID NOS: 423
;; SEQ ID NO 64
;; LENGTH: 312
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-09-905-291A-64

Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVSFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118
Db 59 SRLEWKKLGRSVSFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118

Qy 119 QNLEEDTTLVLVAPVAPSPCEVPSSALSGTVELRCODKEGNPAPEYTFWKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVAPSPCEVPSSALSGTVELRCODKEGNPAPEYTFWKDGIRLLEN 178

Qy 179 PRGQSSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCARNVGYRRCPCGKRMQVDDLNIS 238
Db 179 PRGQSSTNSSTYMTNTKTGTLQFNTVSKLDTGEYSCARNVGYRRCPCGKRMQVDDLNIS 238

Qy 239 GIITAAVVVVALVISVCGLVGCYVQAKRGYFSKETSFKQSNSSSKATTMSEN 288
Db 239 GIITAAVVVVALVISVCGLVGCYVQAKRGYFSKETSFKQSNSSSKATTMSEN 288

RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.

```
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1 (US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US/09/254,465
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-953-499-9

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLVAVAPVCPVSSALSGTVVLCRCQKGNPAPETWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAVAPVCPVSSALSGTVVLCRCQKGNPAPETWFKDGIRLLEN 178

QY 179 PRIGSQSTNSSYTMNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPCGRMVDLNLIS 238
Db 179 PRIGSQSTNSSYTMNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPCGRMVDLNLIS 238

QY 239 GIIAAVVVVALVISVCGLVGYCAQRKGYSFKTSFKQSNSSSKATTMSN 288
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; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; ACIDS ENCODING THE SAME
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/902,853
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: US/09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
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; PRIOR APPLICATION NUMBER: PCT/US99/21547
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; PRIOR APPLICATION NUMBER: PCT/US99/23089
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; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-09-902-853-64

Query Match      77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 59 SRLEWKKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGSRVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118

QY 119 QNLEEDTTLVLVAVAPVCPVSSALSGTVVLCRCQKGNPAPETWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAVAPVCPVSSALSGTVVLCRCQKGNPAPETWFKDGIRLLEN 178

QY 179 PRIGSQSTNSSYTMNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPCGRMVDLNLIS 238
Db 179 PRIGSQSTNSSYTMNTKTGTLQNTVSKLDTGYSCEARNVGYRRCPCGRMVDLNLIS 238

QY 239 GIIAAVVVVALVISVCGLVGYCAQRKGYSFKTSFKQSNSSSKATTMSN 288
Db 239 GIIAAVVVVALVISVCGLVGYCAQRKGYSFKTSFKQSNSSSKATTMSN 288
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RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
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; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
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; PRIOR APPLICATION NUMBER: PCT/US99/20594
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; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64
Query Match 77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 59 SRLEWKKLGRSVSFYVYQOQTLOGDFKRAEMIDFNIRIKNTVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVSFYVYQOQTLOGDFKRAEMIDFNIRIKNTVTRSDAGKYRCEVSAPSEQ 118
QY 119 QNLEEDTVTLEVLVAPVPSCEVPSSALSGTVVLRQDKEGNPAPEYTWFKDGIIRLLEN 178
Db 119 QNLEEDTVTLEVLVAPVPSCEVPSSALSGTVVLRQDKEGNPAPEYTWFKDGIIRLLEN 178
QY 179 PRLGSQSTNSSYTWNKTGTGLQFNTVSKLDGTGEYSCEARNVGYRRCPGKMQVDDLNIS 238
Db 179 PRLGSQSTNSSYTWNKTGTGLQFNTVSKLDGTGEYSCEARNVGYRRCPGKMQVDDLNIS 238
QY 239 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKSNSSSKATTMSEN 288
Db 239 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKSNSSSKATTMSEN 288

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; CURRENT FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
```

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; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match          77.2%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTGVVLRCDKEGNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTGVVLRCDKEGNPAPEYTWFKDGIRLLEN 178

Qy 179 PRLGQSTNSSYTWNTKTGTLOFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 238
Db 179 PRLGQSTNSSYTWNTKTGTLOFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 238

Qy 239 GIIAAVVVVALVISVCGLVGCYVCAQRKGYSFKTSFKQNSSSSKATTMSEN 288
Db 239 GIIAAVVVVALVISVCGLVGCYVCAQRKGYSFKTSFKQNSSSSKATTMSEN 288

RESULT 15
US-09-904-011-64
; Sequence 64, Application US/09904011
; Publication No. US20030003530A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Klatver, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secured and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
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; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match          77.2%; Score 230; DB 11; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-207;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
Db 59 SRLEWKKLGRSVFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTGVVLRCDKEGNPAPEYTWFKDGIRLLEN 178
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTGVVLRCDKEGNPAPEYTWFKDGIRLLEN 178

Qy 179 PRLGQSTNSSYTWNTKTGTLOFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 238
Db 179 PRLGQSTNSSYTWNTKTGTLOFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 238

Qy 239 GIIAAVVVVALVISVCGLVGCYVCAQRKGYSFKTSFKQNSSSSKATTMSEN 288
Db 239 GIIAAVVVVALVISVCGLVGCYVCAQRKGYSFKTSFKQNSSSSKATTMSEN 288

Search completed: December 9, 2003, 17:34:15
Job time : 28.5157 secs
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:21:03 ; Search time 14.5366 Seconds
(without alignments)
1971.458 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARRSRHRLLLLLRLYLWA.....SSKATTWSENFKHKTSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 283308 seqs, 96168682 residues

Word size : 50

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : PIR_76.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description

No matches found						

Search completed: December 9, 2003, 17:25:56
Job time : 14.5366 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:14:27 ; Search time 10.3833 Seconds
(without alignment)
1349.666 Million cell updates/sec

Title: US-09-852-797-76

Perfect score: 298

Sequence: 1 MARSRRHLLLLRLVVA.....SSKATTMSNDFKHTKSFII 298

Scoring table:

Gapop 60.0 , Gapext 60.0

Searched: 127863 seqs, 47026705 residues

Word size : 50

Total number of hits satisfying chosen parameters: 1

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	240	80.5	298	1	JAM2_HUMAN

ALIGNMENTS

RESULT 1
JAM2_HUMAN
ID JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE junction-associated molecule) (VE-JAM).
GN JAM2 OR VEJAM OR C21ORP43.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;
RT "Vascular endothelial junction-associated molecule, a novel member of
RT the immunoglobulin superfamily, is localized to intercellular
RT boundaries of endothelial cells."
RL J. Biol. Chem. 275:19139-19145(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976;

RA Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjerkke R.J.,
RA Vanderslice P., Morris A.P., Brock T.A.;
RT "A novel protein with homology to the junctional adhesion molecule:
RT Characterization of leukocyte interactions.";
RL J. Biol. Chem. 275:34750-34756(2000).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udén T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodrigues S., Sanchez A.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -1- FUNCTION: MAY PLAY A ROLE IN THE PROCESSES OF LYMPHOCYTE HOMING TO
CC SECONDARY LYMPHOID ORGANS.
CC -1- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC -1- TISSUE SPECIFICITY: PROMINENTLY EXPRESSED ON HIGH ENDOTHELIAL
CC VENULES BUT IS ALSO PRESENT ON THE ENDOTHELIA OF OTHER VESSELS.
CC LOCALIZED TO THE INTERCELLULAR BOUNDARIES OF HIGH ENDOTHELIAL
CC CELLS.
CC -1- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -1- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -1- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC -1- DATABASE: NAME=PROW; NOTE=PROW 2:1-3(2001);
CC WWW="http://www.ncbi.nlm.nih.gov/prow/guide/1652492186_g.htm".
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; AF255910; AAF81223.1; -
CC EMBL; AY016009; AAG49022.1; -
CC EMBL; BC017779; AAH17779.1; -
CC Genew; HGNC:14686; JAM2.
CC MIM; 606870; -
CC GO; GO:0005887; C: integral to plasma membrane; NAS.
CC GO; GO:0016337; P: cell-cell adhesion; NAS.
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR003598; Ig_c2.
CC InterPro; IPR003006; Ig_MHC.
CC Pfam; PF00047; Ig; 2.
CC SMART; SM00408; IGC2; 1.
CC PROSITE; PS50835; IG_LIKE; 2.
CC Immunoglobulin domain; Glycoprotein; Transmembrane; Signal.
CC SIGNAL 1 20 POTENTIAL.
CC CHAIN 21 298 JUNCTIONAL ADHESION MOLECULE 2.
CC DOMAIN 21 238 EXTRACELLULAR (POTENTIAL).
CC TRANSMEM 239 259 POTENTIAL.
CC DOMAIN 260 298 CYTOPLASMIC (POTENTIAL).
CC DOMAIN 32 127 IG-LIKE V-TYPE.
CC DOMAIN 134 238 IG-LIKE C2-TYPE.
CC DISULFID 50 109 POTENTIAL.
CC DISULFID 155 214 POTENTIAL.

FT	CARBOHYD	98	98	N-LINKED (GLCNAC. . .)	(POTENTIAL).
FT	CARBOHYD	187	187	N-LINKED (GLCNAC. . .)	(POTENTIAL).
FT	CARBOHYD	236	236	N-LINKED (GLCNAC. . .)	(POTENTIAL).
SO	SEQUENCE	298	AA; 33207	MW; CA78E518E22DCAEE	CRC64;

Query Match 80.5%; Score 240; DB 1; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.1e-214;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	59	SRLEWKILGRSVSFYYQOTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ	118
Db	59	SRLEWKILGRSVSFYYQOTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ	118
Qy	119	QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTFKDGIRLLEN	178
Db	119	QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCODKEGNPAPEYTFKDGIRLLEN	178
Qy	179	PRLGSQSTNSSYTMNTKTGTLQFNFTVSKLDTGEYSCEARNSVGYYRRCFGKMQVDDLNIS	238
Db	179	PRLGSQSTNSSYTMNTKTGTLQFNFTVSKLDTGEYSCEARNSVGYYRRCFGKMQVDDLNIS	238
Qy	239	GIIAAVVVVVALVISVCGGLGVCYAQRKGYFSKETSFKQKSNSSSKATTWSENDFKHTKGFII	298
Db	239	GIIAAVVVVVALVISVCGGLGVCYAQRKGYFSKETSFKQKSNSSSKATTWSENDFKHTKGFII	298

Search completed: December 9, 2003, 17:24:01
Job time : 11.3833 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:20:17 ; Search time 32.1882 Seconds
(without alignments)
2389.068 Million cell updates/sec

Title: US-09-852-797-76
Perfect score: 298
Sequence: 1 MARRSRHRLLLRLVVA.....SSKATTMSNDPKHTKSFII 298

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 830525 seqs, 258052604 residues

Word size : 50

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : SPTREMBL 23.*

- 1: sp_archaea.*
- 2: sp_bacteria.*
- 3: sp_fungi.*
- 4: sp_human.*
- 5: sp_invertebrate.*
- 6: sp_mammal.*
- 7: sp_mhc.*
- 8: sp_organelle.*
- 9: sp_phage.*
- 10: sp_plant.*
- 11: sp_rodent.*
- 12: sp_virus.*
- 13: sp_vertebrate.*
- 14: sp_unclassified.*
- 15: sp_rvirus.*
- 16: sp_bacteriap.*
- 17: sp_archheap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
------------	-------	-------------	--------	-------	-------------

No matches found

Search completed: December 9, 2003, 17:25:15
Job time : 32.1882 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:07:01 ; Search time 36.5436 Seconds
(without alignments)
1198.803 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

Sequence: 1 YHKAYGFSAPKQQVTVAVX.....SSKATTSEDFKHTKSFII 276

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1107863 seqs, 158726573 residues

Total number of hits satisfying chosen parameters: 1107863

Minimum DE seq length: 0

Maximum DE seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A Geneseq_19Jun03.*

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1: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
3: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*
4: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1983.DAT.*
5: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1984.DAT.*
6: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1985.DAT.*
7: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1986.DAT.*
8: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1987.DAT.*
9: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1988.DAT.*
10: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1989.DAT.*
11: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1990.DAT.*
12: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1991.DAT.*
13: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1992.DAT.*
14: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1993.DAT.*
15: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1994.DAT.*
16: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1995.DAT.*
17: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1996.DAT.*
18: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1997.DAT.*
19: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1998.DAT.*
20: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1999.DAT.*
21: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
24: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1415	99.8	298	19	Secreted protein e
2	1415	99.8	298	22	Human functional a
3	1415	99.8	298	23	Human polypeptide
4	1415	99.8	298	24	Human functional a
5	1415	99.7	298	19	Human secreted pro
6	1414	99.7	298	23	Human gene 25 enco
7	1414	99.7	298	23	Human gene 25 enco
8	1414	99.7	298	24	Human secreted pro
9	1414	99.7	298	24	Human secreted pro

10	1414	99.7	298	24	ABR00172	Human gene 162 enc
11	1399.5	98.7	303	22	AAW23693	Human EST encoded
12	1362	96.1	312	20	AAW08060	Human PRO245 prote
13	1362	96.1	312	20	AAW13354	A33 related antige
14	1362	96.1	312	20	AAW13354	Amino acid sequenc
15	1362	96.1	312	21	AAW33421	Human PRO245 prote
16	1362	96.1	312	21	AAW34401	Human PRO245 prote
17	1362	96.1	312	21	AAW70668	Human PRO245 prote
18	1362	96.1	312	22	AAU12339	Human immune respo
19	1362	96.1	312	22	AAU00821	Human PRO245 prote
20	1362	96.1	312	22	AAW80222	Human angiogenesis
21	1362	96.1	312	22	AAW33081	Novel human secret
22	1362	96.1	312	24	ABU69632	Human PRO polypept
23	1362	96.1	312	24	ABU71455	Human secreted/tra
24	1362	96.1	312	24	ABU71901	Human A-33 related
25	1362	96.1	312	24	ABU67738	Human PRO polypept
26	1362	96.1	312	24	ABU66737	Human secreted/tra
27	1362	96.1	312	24	ABU67013	Human secreted pro
28	1362	96.1	312	24	ABU67355	Human secreted and
29	1362	96.1	312	24	ABU59818	Human secreted/tra
30	1362	96.1	312	24	ABU64509	Human secreted/tra
31	1362	96.1	312	24	ABU54357	Human PRO245 prote
32	1356	95.6	312	22	AAW50904	Human polypeptide
33	1143	80.6	222	22	AAW41947	Novel human diagno
34	1139.5	80.4	388	22	ABG22341	Human confluency r
35	1128	79.5	298	21	AAW27273	Murine confluency
36	1128	79.5	298	21	AAW27275	Angiogenesis prote
37	1106	78.0	215	22	AAW70500	Human confluency r
38	1092	77.0	213	21	AAW27277	Novel human diagno
39	702.5	49.5	140	22	ABG22338	Human polypeptide
40	547	38.6	107	22	AAW40161	Human confluency r
41	486.5	34.3	310	21	AAW27272	Murine confluency
42	486.5	34.3	310	21	AAW27278	Human confluency r
43	477.5	33.7	310	21	AAW27276	Human confluency r
44	477.5	33.7	310	21	AAW33457	Human PRO1868 prot
45	477.5	33.7	310	21	AAW96735	PRO1868, an A33 an

ALIGNMENTS

RESULT 1

AAW85457

ID AAW85457 standard; Protein; 298 AA.

AC AAW85457;

XX 25-FEB-1999 (first entry)

XX Secreted protein encoded by clone ct864_4.

XX Secreted protein; nutritional activity; immune stimulating; vaccine;
XX suppressing activity; haematopoiesis regulating activity;
XX tissue growth activity; activin; inhibin activity; chemotaxis;
XX chemokinetic activity; haemostasis; thrombolytic activity; receptor;
XX ligand; anti-inflammatory; cadherin; tumour invasion suppressor;
XX tumour inhibition; gene therapy.

OS Homo sapiens.

XX WO9842739-A2.

XX 01-OCT-1998.

XX 20-MAR-1998; 98WO-US05653.

XX 19-MAR-1998; 98US-0044466.

XX 21-MAR-1997; 97US-0822167.

XX (GEMY) GENETICS INST INC.

XX Agostino MU, Jacobs K, Lavallie ER, McCoy JM, Merberg D;

XX Racie LA, Spaulding V, Treacy M;

```

XX DR WPI; 1998-609890/51.
XX DR N-PSDB; AAV82780.
XX
XX PT New polynucleotides encoding secreted human proteins - derived from
XX PT human foetal brain, adult brain, foetal kidney, placenta or adult
XX PT pineal gland cDNA libraries.
XX
XX PS Claim 17; Page 73-74; 113pp; English.
XX
XX CC The present sequence represents a secreted protein. The polynucleotide
XX CC and secreted protein are predicted to have biological activities which
XX CC would make them suitable for treating, preventing or ameliorating medical
XX CC conditions in humans and animals, although no supporting data is given.
XX CC Suggested activities include nutritional activity, immune stimulating
XX CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
XX CC activity, tissue growth activity, activin/inhibin activity,
XX CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
XX CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
XX CC invasion suppressor activity, and tumour inhibition activity (no data is
XX CC given in the specification to support these activities). The
XX CC polynucleotide is also stated to be useful for gene therapy.
XX
XX SQ Sequence 298 AA;
Query Match 99.8%; Score 1415; DB 19; Length 298;
Best Local Similarity 99.3%; Pred. No. 1.6e-111;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKDDQVVAVXYQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 60
DB 23 YHKAYGFSAPKDDQVVAVXYQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDVTTLVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLLENPRLGQSQTNSSTYTNWTKTGLQFN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLLENPRLGQSQTNSSTYTNWTKTGLQFN 202
QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 240
DB 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 262
QY 241 RKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFII 276
DB 263 RKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFII 298
RESULT 2
AAU00512
ID AAU00512 standard; Protein; 298 AA.
XX
XX AC AAU00512;
XX
XX DT 09-MAY-2001 (first entry)
XX
XX DE Human junctional adhesion protein (JAM2).
XX
XX KW Junctional adhesion protein; JAM2; cellular localisation;
XX KW cellular expression; immunoprecipitation; stroke; phosphorylation;
XX KW glycosylation; paracellular migration; inflammatory disease;
XX KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
XX KW Crohn's disease.
XX
XX OS Homo sapiens.
XX
XX FH Key Location/Qualifiers
XX FT Peptide 1..20
XX FT Peptide /note= "Possible signal peptide #1"
XX FT Peptide 1..28
XX FT Peptide /note= "Possible signal peptide #2"

```

```

FT Protein 21..298
FT /note= "Possible mature JAM2 #1"
FT Protein 29..298
FT /note= "Possible mature JAM2 #2"
FT Domain 237..254
FT /note= "Transmembrane domain"
XX
XX PN WO200114404-A1.
XX
XX PD 01-MAR-2001.
XX
XX PF 23-AUG-2000; 2000WO-US23158.
XX
XX PR 24-AUG-1999; 99US-0150459.
XX
XX PA (TEXA-) TEXAS BIOTECHNOLOGY CORP.
XX
XX PI Cunningham S, Trindad Arrate Barros M;
XX
XX DR WPI; 2001-218425/22.
XX DR N-PSDB; AAS00512.
XX
XX PT Novel nucleic acids encoding human junctional adhesion protein useful
XX PT for producing antibodies that are suitable for therapeutic purposes -
XX
XX PS Claim 4; Page 46-47; 51pp; English.
XX
XX CC The sequence represents a human junctional adhesion molecule 2 (JAM2).
XX CC The polynucleotide encoding the polypeptide is useful for recombinant
XX CC production of JAM-2 protein, which in turn is useful for the production
XX CC of antibodies. The antibodies may be used for probing cellular
XX CC localisation and/or expression of JAM2 in tissues under normal and
XX CC disease states, for immunoprecipitating JAM2 protein from cells and/or
XX CC stroke tissues to determine whether it is modified by glycosylation and
XX CC phosphorylation, and for determining JAM2 function. The antibodies
XX CC inhibit interaction of JAM2 with inflammatory cells or influences their
XX CC paracellular migration, and is therefore useful for alleviating
XX CC inflammatory diseases such as arthritis, asthma, rheumatoid arthritis,
XX CC inflammatory bowel disease and Crohn's disease.
XX
XX SQ Sequence 298 AA;
Query Match 99.8%; Score 1415; DB 22; Length 298;
Best Local Similarity 99.3%; Pred. No. 1.6e-111;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKDDQVVAVXYQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 60
DB 23 YHKAYGFSAPKDDQVVAVXYQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDVTTLVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLLENPRLGQSQTNSSTYTNWTKTGLQFN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTFWFKDGIIRLLENPRLGQSQTNSSTYTNWTKTGLQFN 202
QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 240
DB 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 262
QY 241 RKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFII 276
DB 263 RKGYSKETSFOKSNSSSKATTMSNDPFKHTKSFII 298
RESULT 3
ABP61801
ID ABP61801 standard; Protein; 298 AA.
XX
XX AC ABP61801;
XX

```


DR N-PSDB; AAL51599.

XX New extracellular human junctional adhesion molecule (hujAM)

PT polypeptide, useful for treating an immune system disorder such as an

PT immune deficiency or an inflammatory disorder, cancer, wound healing,

PT or a cardiovascular disease

XX Disclosure; Fig 1; 131pp; English.

XX The invention comprises the DNA and protein sequences of the

CC extracellular region of human junctional adhesion molecules (hujAM). The

CC extracellular hujAM DNA and protein sequences are useful in the treatment

CC of: immune system disorders (e.g. immune deficiency); autoimmune

CC disorders; inflammatory disorders; cancer; wound healing; or a

CC cardiovascular disease. The present amino acid sequence represents the

CC full-length membrane-bound hujAM2 protein.

XX

SQ Sequence 298 AA;

Query Match 99.8%; Score 1415; DB 24; Length 298;

Best Local Similarity 99.3%; Pred. No. 1.6e-111;

Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVTAAYVQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 60

Db 23 YHKAYGFSAPKDDQVVTAAYVQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGGQNLLEEDTTLVLVAPVPSCEVP 120

Db 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGGQNLLEEDTTLVLVAPVPSCEVP 142

QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWKDGRLLLENPLGSGSTNSSTMTKTGLQFN 180

Db 143 SSALSGTVVELRCQDKEGNPAPEYTFWKDGRLLLENPLGSGSTNSSTMTKTGLQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNSIGIIAAVVVVALVISVGLGVCAQ 240

Db 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNSIGIIAAVVVVALVISVGLGVCAQ 262

QY 241 RKGYSKETSFOKSNSSKATMTSENDFKHTKSFII 276

Db 263 RKGYSKETSFOKSNSSKATMTSENDFKHTKSFII 298

RESULT 5

AAW75220

ID AAW75220 standard; Protein; 298 AA.

AC AAW75220;

XX

DT 29-JAN-1999 (first entry)

XX Human secreted protein encoded by gene 25 clone HTEB42.

XX Human; secreted protein; fusion protein; gene therapy; protein therapy;

KW diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;

KW developmental abnormality; foetal deficiency; blood; allergy; renal;

KW immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;

KW inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;

KW cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;

KW osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;

KW endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.

XX Homo sapiens.

OS

XX

XX Key Location/Qualifiers

PH Misc-difference 42 /label= unknown

FT Misc-difference 58 /label= unknown

FT

XX

PN W09804083-A2.

PD 17-SEP-1998.

XX

PF 12-MAR-1998; 98WO-US04858.

XX

PR 19-DEC-1997; 97US-0068368.

PR 14-MAR-1997; 97US-0040710.

PR 14-MAR-1997; 97US-0040762.

PR 30-MAY-1997; 97US-0048100.

PR 30-MAY-1997; 97US-0048189.

PR 30-MAY-1997; 97US-0048357.

PR 30-MAY-1997; 97US-0050934.

PR 06-JUN-1997; 97US-0048970.

PR 05-SEP-1997; 97US-0057765.

XX

PA (HUMA-) HUMAN GENOME SCI INC.

XX

PI Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;

PI Li H, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;

PI Wei YF, Young PE, Zeng Z;

XX

DR WPI; 1998-520811/44.

DR N-PSDB; AAV34310.

XX

PT Isolated human polynucleotide(s) encoding secretory peptide(s) -

PT used to develop products for the diagnosis and treatment of e.g.

PT inflammation, cancers, CNS disorders or immune system disorders

XX

PS Claim 1; Page 168-169; 201pp; English.

XX

CC This sequence represents a secreted human protein encoded by the gene

CC clone detailed in the descriptor line. The gene can be used to generate

CC fusion proteins by linking to the gene to a human immunoglobulin Fc

CC portion (e.g. AAV34277) for increasing the stability of the fused

CC protein as compared to the human protein only.

CC The invention relates to 28 novel genes and their fragments (nucleic

CC acid sequences: AAV34286-V34325; amino acid sequences AAV75196-W75235)

CC which are useful for preventing, treating or ameliorating medical

CC conditions e.g. by protein or gene therapy. Also, pathological

CC conditions can be diagnosed by determining the amount of the new

CC polypeptides in a sample or by determining the presence of mutations in

CC the new polynucleotides. Specific uses are described for each of the 28

CC polynucleotides, based on which tissues they are most highly expressed in

CC (see AAV34286 for described uses).

XX

SQ Sequence 298 AA;

Query Match 99.7%; Score 1414; DB 19; Length 298;

Best Local Similarity 100.0%; Pred. No. 2e-111;

Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVTAAYVQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 60

Db 23 YHKAYGFSAPKDDQVVTAAYVQEAAILACKTPKKTVXSRLWKLGSRVSFVYQQTLQGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGGQNLLEEDTTLVLVAPVPSCEVP 120

Db 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSPSEGGQNLLEEDTTLVLVAPVPSCEVP 142

QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWKDGRLLLENPLGSGSTNSSTMTKTGLQFN 180

Db 143 SSALSGTVVELRCQDKEGNPAPEYTFWKDGRLLLENPLGSGSTNSSTMTKTGLQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNSIGIIAAVVVVALVISVGLGVCAQ 240

Db 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNSIGIIAAVVVVALVISVGLGVCAQ 262

QY 241 RKGYSKETSFOKSNSSKATMTSENDFKHTKSFII 276

Db 263 RKGYSKETSFOKSNSSKATMTSENDFKHTKSFII 298

RESULT 6

AAE26983

XX OS Homo sapiens.
XX PH Key Location/Qualifiers
XX FT Peptide 1..22
XX FT /label= Signal_peptide
XX FT Protein 23..298
XX FT /note= "Mature human secreted protein"
XX FT Misc-difference 42
XX FT /label= Unknown
XX FT /note= "Encoded by GWG"
XX FT Misc-difference 58
XX FT /label= Unknown
XX FT /note= "Encoded by TSC"
XX PN US2002076756-A1.
XX PD 20-JUN-2002.
XX PF 11-MAY-2001; 2001US-0853161.
XX PR 02-FEB-2001; 2001US-265583P.
XX PA (RUBE/) RUBEN S M.
XX PA (ROSE/) ROSEN C A.
XX PA (LIYY/) LI Y.
XX PA (ZENG/) ZENG Z.
XX PA (KYAW/) KYAW H.
XX PA (FISC/) FISCHER C L.
XX PA (LIHH/) LI H.
XX PA (SOPP/) SOPPET D R.
XX PA (GENT/) GENTZ R L.
XX PA (WEIY/) WEI Y.
XX PA (MOOR/) MOORE P A.
XX PA (YOUN/) YOUNG P E.
XX PA (GREE/) GREENE J M.
XX PA (FERR/) FERRIE A M.
XX PI Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
XX PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM,
XX PI Ferrie AM;
XX WPI: 2002-574454/61.
XX DR N-PSDB; AAD44878.
XX PT New nucleic acid molecules encoding 28 human secreted proteins, useful
XX PT for diagnosing, preventing, treating or ameliorating medical conditions
XX PT and as food additives or preservatives -
XX PS Claim 11; Page 186-187; 209pp; English.
XX CC AAD44854-AAD44984 represent cDNAs corresponding to 28 human secreted
XX CC protein genes, and AAE27097-AAE27137 represent the proteins they encode.
XX CC AAE27138-AAE27164 represent human secreted protein fragments. The genes
XX CC and their corresponding secreted proteins are useful for preventing,
XX CC treating or ameliorating medical conditions, e.g., by protein or gene
XX CC therapy. Secreted protein sequences of the invention are useful for the
XX CC diagnosis or treatment of disorders such as autoimmune diseases (e.g.
XX CC rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
XX CC the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
XX CC angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
XX CC system disorders (e.g. Alzheimer's disease), infections caused by fungi,
XX CC bacteria and viruses and ocular disorders (e.g. corneal infection). The
XX CC polypeptides can also be used to aid wound healing and epithelial cell
XX CC proliferation, to prevent skin aging due to sunburn, to maintain organs
XX CC before transplantation, for supporting cell culture of primary tissues,
XX CC to regenerate tissues and in chemotaxis. They can also be used as food
XX CC additives or preservative to increase or decrease storage capabilities,
XX CC fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
XX CC and other nutritional components. The present sequence represents a human
XX CC secreted protein of the invention.
XX SQ Sequence 298 AA;

Query Match 99.7%; Score 1414; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 2e-111;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKQQVVTAVXYQEAAILACKTPKKTVAKSRLKWKLGSRVSFVYQOOLQGD 60
DB 23 YHKAYGFSAPKQQVVTAVXYQEAAILACKTPKKTVAKSRLKWKLGSRVSFVYQOOLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQONLEEDTTLVLVAPVPSCVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQONLEEDTTLVLVAPVPSCVP 142
QY 121 SSALSGTVVVELRCQDKGPNAPETWFKDGIIRLENPRIGSQSTNSSTYTNKTGTLOFN 180
DB 143 SSALSGTVVVELRCQDKGPNAPETWFKDGIIRLENPRIGSQSTNSSTYTNKTGTLOFN 202
QY 181 TVSKLDTGYSCEARNISVGYRRCPCGKRMQVDDLNISGIIAAVVVALVSVCGLGVCYAO 240
DB 203 TVSKLDTGYSCEARNISVGYRRCPCGKRMQVDDLNISGIIAAVVVALVSVCGLGVCYAO 262
QY 241 RKGYFSKETSPKSNSSSKATTMSSENDFKHTKSFII 276
DB 263 RKGYFSKETSPKSNSSSKATTMSSENDFKHTKSFII 298
RESULT 8
ABR47926
ID ABR47926 standard; Protein; 298 AA.
XX AC ABR47926;
XX DT 12-JUN-2003 (first entry)
XX DE Human secreted protein, SEQ ID 817.
XX KW Cardiant; antiarrhythmic; antiarteriosclerotic; vasototropic; cytostatic;
XX KW vulnary; antiinflammatory; nootropic; neuroprotective;
XX KW antiparkinsonian; gene therapy; human; cardiovascular disorder.
XX OS Homo sapiens.
XX PN WO200295010-A2.
XX PD 28-NOV-2002.
XX PF 19-MAR-2002; 2002WO-US09785.
XX PR 21-MAR-2001; 2001US-277340P.
XX PR 19-JUL-2001; 2001US-306171P.
XX PR 13-NOV-2001; 2001US-331287P.
XX PA (HUMA-) HUMAN GENOME SCI INC.
XX PI Rosen CA, Ruben SM;
XX WPI; 2003-129429/12.
XX PT Novel human secreted proteins, useful for detecting, preventing,
XX PT diagnosing, prognosticating, treating and/or ameliorating
XX PT cardiovascular disorders such as arrhythmia -
XX PS Claim 13; SEQ ID 817; 1881pp; English.
XX CC The present invention relates to novel human secreted proteins
XX CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
XX CC proteins and their coding sequences are useful for the preparation of a
XX CC diagnostic or pharmaceutical composition for diagnosing or treating a
XX CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
XX CC coronary arteriosclerosis and myocardial ischaemia), neural disorders,
XX CC immune system disorders, muscular disorders, reproductive disorders,
XX CC gastrointestinal disorders, pulmonary disorders, renal disorders, or
XX CC proliferative disorders and/or cancerous diseases and conditions, for

CC wound healing and epithelial cell proliferation, to treat inflammation or
CC infection, for treating thrombosis and arteriosclerosis, for treating or
CC preventing neural damage which occurs in neuronal disorders or
CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
CC disease, to enhance bone and periodontal regeneration and aid in tissue
CC transplants or bone grafts, to prevent skin aging or hair loss, to
CC stimulate growth and differentiation of haematopoietic cells and bone
CC marrow cells when used in combination with other cytokines, to maintain
CC organs before transplantation or for supporting cell culture of primary
CC tissues, to increase or decrease differentiation or proliferation of
CC embryonic stem cells, or to modulate mammalian characteristics or
CC metabolism.
CC Note: The sequence data for this patent was published in electronic
CC format and is available from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 298 AA;

Query Match 99.7%; Score 1414; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 2e-111;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YKAYGFSAPKQOVVTAHYQBAAILACKTPKKTIVSRLEWKKLGRSVFVYQOTLQGD 60
DB 23 YKAYGFSAPKQOVVTAHYQBAAILACKTPKKTIVSRLEWKKLGRSVFVYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDACKYCEVSAPEQGNLEEDVTLEVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDACKYCEVSAPEQGNLEEDVTLEVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKGNPAPEYTFWKGIRLLENPRLGQSTNSGYTMTKTGLQFN 180
DB 143 SSALSGTVVELRCQDKGNPAPEYTFWKGIRLLENPRLGQSTNSGYTMTKTGLQFN 202
QY 181 TVSKLDTGYSCEARNSVGRPCGKRMQVDDINISGIITAAVVALVSVCGLGVCYQAQ 240
DB 203 TVSKLDTGYSCEARNSVGRPCGKRMQVDDINISGIITAAVVALVSVCGLGVCYQAQ 262
QY 241 RKGYFSKETSFKNSNSSKATMTSENDFKHTKSFII 276
DB 263 RKGYFSKETSFKNSNSSKATMTSENDFKHTKSFII 298

RESULT 9
ABU64994
ID ABU64994 standard; Protein; 298 AA.
AC ABU64994;
XX
XX
DT 15-MAY-2003 (first entry)
DE Human secreted protein gene 25, protein.
KW Secreted protein; immunodeficiency; multiple sclerosis;
KW severe combined immunodeficiency; autoimmune disorder; cancer;
KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;
KW inflammatory condition; septic shock; inflammatory bowel disease;
KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;
KW gastrointestinal disorder; central nervous system disorder;
KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;
KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;
KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;
KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;
KW endocrine disorder; liver disease; reproductive system disorder;
KW endometriosis; infectious disease; pancreatic disorder; vaccine;
KW wound repair; angiogenesis; lymphatic disorder; hair loss; body weight;
KW body height; hair colour; human.
OS Homo sapiens.
XX
XX
FN US2002172994-A1.
XX
XX
PD 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.
XX
PR 14-MAR-1997; 97US-040710P.
PR 14-MAR-1997; 97US-040762P.
PR 30-MAY-1997; 97US-048100P.
PR 30-MAY-1997; 97US-048189P.
PR 30-MAY-1997; 97US-048357P.
PR 30-MAY-1997; 97US-050934P.
PR 06-JUN-1997; 97US-048970P.
PR 05-SEP-1997; 97US-057765P.
PR 19-DEC-1997; 97US-068368P.
PR 02-FEB-2001; 2001US-265583P.
PR 12-MAR-1998; 98WO-US04858.
PR 11-SEP-1998; 98US-0152060.
XX
PA (RUBE/) RUBEN S M.
PA (ROSE/) ROSEN C A.
PA (LIYV/) LI Y.
PA (ZENG/) ZENG Z.
PA (KYAW/) KYAW H.
PA (FISC/) FISCHER C L.
PA (LIHH/) LI H.
PA (SOPP/) SOPPET D R.
PA (GENT/) GENTZ R L.
PA (WEIV/) WEI Y.
PA (MOOR/) MOORE P A.
PA (YOUN/) YOUNG P E.
PA (GREE/) GREENE J M.
PA (FERR/) FERRIE A M.
XX
PI Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JW;
PI Ferrie AM;
XX WPI; 2003-310989/30.
DR N-PSDB; ABX96990.
XX
PT New human secreted polypeptides and polynucleotides for diagnosing,
PT prognosing, preventing and treating immune, hyperproliferative, liver,
PT kidney, reproductive disorders and for identifying modulators of
PT therapeutic use -
XX
PS Claim 11; Page 186; 209pp; English.
XX
CC The invention relates to an isolated polypeptide comprising an amino acid
CC sequence at least 95% identical to sequence of 28 human secreted
CC proteins, their fragment, polypeptide domain, epitope, secreted form,
CC variant, allelic variant, or species homologue, or the encoded sequence
CC included in ATCC 97921 and 97922. Also included are the encoding
CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
CC The proteins and nucleic acids are useful for diagnosing, preventing,
CC treating, prognosing or ameliorating a medical condition e.g.
CC immunodeficiencies (e.g. X-linked agammaglobulinaemia, B cell
CC disorders (e.g. systemic erythematous, rheumatoid arthritis, autoimmune
CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
CC haematopoietic disorders, inflammatory conditions (e.g. septic shock,
CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
CC disorders (e.g. gastric, ovarian, lung, bladder, liver and
CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
CC injury and/or stroke, traumatic brain injury), neurodegenerative
CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
CC dementia, and prion disease), cardiovascular disorders (e.g.
CC atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis, dermatitis, allogeneic transplant rejection),
CC blood-related disorders (thrombosis, arterial thrombosis),
CC hyperproliferative disorders, renal disorders (e.g. acute
CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
CC hyperthyroidism, hyperpituitarism), liver diseases and disorders,

CC reproductive system disorders (e.g. endometriosis), infectious diseases,
CC and pancreatic disorders. Many other diseases and disorders are listed in
CC the specification. They also useful as a vaccine adjuvant. Further they
CC are useful to enhance or inhibit complement mediated cell lysis, for
CC stimulating wound and tissue repair, angiogenesis, and the repair of
CC vascular or lymphatic diseases or disorders. They are also useful
CC to prevent hair loss, to modulate mammalian characteristics such as body
CC height, weight, hair colour, and to increase or decrease storage
CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
CC minerals, cofactors or other nutritional components. The proteins are
CC also useful for identifying binding partners. The present sequence
CC represents a secreted protein of the invention.

XX
SQ Sequence 298 AA;
Query Match 99.7%; Score 1414; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 2e-111;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKDDQVVAVXQYQAILLACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 60
DB 23 YHKAYGFSAPKDDQVVAVXQYQAILLACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQONLEEDTTLVLVAPVAPVCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQONLEEDTTLVLVAPVAPVCEVP 142
QY 121 SSALSGTVVELRCQDEKGNPAPETWFKDGIIRLLENPRLGSGQSTNSYTMNTKTGLQFN 180
DB 143 SSALSGTVVELRCQDEKGNPAPETWFKDGIIRLLENPRLGSGQSTNSYTMNTKTGLQFN 202
QY 181 TVSKLDTGEYSCEARNVGYRRCQKRMQVDDNLNIGIIAAVVVALVISVCGLVGYCYAQ 240
DB 203 TVSKLDTGEYSCEARNVGYRRCQKRMQVDDNLNIGIIAAVVVALVISVCGLVGYCYAQ 262
QY 241 RKGYSKETSFKNSSSSKATTMSNDPFKHTKSFI 276
DB 263 RKGYSKETSFKNSSSSKATTMSNDPFKHTKSFI 298

RESULT 10
ABR00172
ID ABR00172 standard; Protein; 298 AA.
XX
AC ABR00172;
XX
DT 03-APR-2003 (first entry)
XX
DE Human gene 162 encoded secreted protein HTEEB42, SEQ ID NO:461.
XX
KW Human; secreted protein; digestive disorder; gastrointestinal disorder;
KW mouth; oesophagus; stomach; small intestine; large intestine; liver;
KW biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
KW immune disorder; inflammation; infection; wound healing; drug screening;
KW chromosome identification; chromosome mapping; cytostatic; gene therapy;
KW antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.
XX

OS Homo sapiens.
XX
FN WO200276488-A1.
XX
PD 03-OCT-2002.
XX
PF 19-MAR-2002; 2002WO-US08276.
XX
PR 21-MAR-2001; 2001US-277340P.
PR 19-JUL-2001; 2001US-306171P.
PR 13-NOV-2001; 2001US-331287P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX

DR WPI: 2003-029900/02.
DR N-PSDB; ABZ71351.
XX
PT New human secreted proteins and nucleic acids, useful for detecting,
PT preventing, diagnosing, prognosticating, treating and/or ameliorating
PT e.g. gastrointestinal diseases and disorders, or cancers -
XX
PS Claim 13; Page 1046-1047; 1216pp; English.
XX
CC ABZ71190-ABZ71478 represent cDNAs corresponding to 178 human secreted
CC protein genes, and ABP00011-ABP00299 represent the proteins they encode.
CC ABZ71479-ABZ71540 represent human secreted protein genomic fragments. The
CC invention also encompasses antibodies specific for the secreted proteins,
CC the use of the secreted proteins in drug screening, and recombinant
CC vectors and host cells comprising a nucleic acid of the invention. The
CC secreted proteins, nucleic acids encoding them, antibodies or antibody
CC fragments specific for the secreted proteins, and modulators of protein
CC activity are useful for diagnosing, treating, ameliorating or preventing
CC digestive disorders. Such conditions include disorders of the mouth,
CC oesophagus, stomach, small intestine, large intestine, liver, biliary
CC tract and pancreas, and include cancers of these organs and tissues. The
CC secreted proteins and their nucleic acids may also be used in the
CC treatment of immune disorders, inflammation, infection,
CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
CC of the invention may be used for chromosome identification, chromosome
CC mapping, in gene therapy, for identifying individuals from minute
CC biological samples, as hybridisation probes, and as molecular weight
CC markers. The present sequence represents a human secreted protein of the
CC invention.

XX
SQ Sequence 298 AA;
Query Match 99.7%; Score 1414; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 2e-111;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKDDQVVAVXQYQAILLACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 60
DB 23 YHKAYGFSAPKDDQVVAVXQYQAILLACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQONLEEDTTLVLVAPVAPVCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQONLEEDTTLVLVAPVAPVCEVP 142
QY 121 SSALSGTVVELRCQDEKGNPAPETWFKDGIIRLLENPRLGSGQSTNSYTMNTKTGLQFN 180
DB 143 SSALSGTVVELRCQDEKGNPAPETWFKDGIIRLLENPRLGSGQSTNSYTMNTKTGLQFN 202
QY 181 TVSKLDTGEYSCEARNVGYRRCQKRMQVDDNLNIGIIAAVVVALVISVCGLVGYCYAQ 240
DB 203 TVSKLDTGEYSCEARNVGYRRCQKRMQVDDNLNIGIIAAVVVALVISVCGLVGYCYAQ 262
QY 241 RKGYSKETSFKNSSSSKATTMSNDPFKHTKSFI 276
DB 263 RKGYSKETSFKNSSSSKATTMSNDPFKHTKSFI 298

RESULT 11
AAM23693
ID AAM23693 standard; Protein; 303 AA.
XX
AC AAM23693;
XX
DT 12-OCT-2001 (first entry)
XX
DE Human EST encoded protein SEQ ID NO: 1218.
XX
KW Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; horse;
KW tomato; monkey; dog; sea urchin; expressed sequence tag; EST;
KW diagnostics; forensic test; gene mapping; genetic disorder;
KW biodiversity; gene therapy; nutrition.
XX
OS Homo sapiens.

XX WO200154477-A2.
 PN 02-AUG-2001.
 XX 25-JAN-2001; 2001WO-US02687.
 XX 25-JAN-2000; 2000US-0491404.
 PR 17-JUL-2000; 2000US-0617746.
 PR 03-AUG-2000; 2000US-0631451.
 PR 15-SEP-2000; 2000US-0663870.
 XX (HYSE-) HYSEQ INC.
 PA Tang YT, Liu C, Zhou P, Qian XB, Wang Z, Chen R, Asundi V;
 PI Cao Y, Drmanac RA, Zhang J, Werhman T;
 XX WPI; 2001-476164/51.
 DR N-PSDB; AAH98352.
 XX Isolated polypeptide for treatment of diseases, diagnostics, raising
 PT antibodies and research use -
 PT Claim 20; Page 878-879; 1275pp; English.
 PS The present invention provides the protein and coding sequences of novel
 CC proteins from a variety of organisms, including human, dog, cat, horse,
 CC cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea
 CC urchin and tomato. These were derived from expressed sequence tags (ESTs)
 CC from the organism of interest. They can be used in diagnostics,
 CC forensics, gene mapping, identification of mutations, to assess
 CC biodiversity and for nutritional purposes. The present sequence is a
 CC protein of the invention.
 XX Sequence 303 AA;
 SQ

Query Match 98.7%; Score 1399.5; DB 22; Length 303;
 Best Local Similarity 97.2%; Pred. No. 3.4e-110;
 Matches 273; Conservative 1; Mismatches 2; Indels 5; Gaps 1;

QY 1 YKAYGFAPKDDQVVTAVYQEAIALACKTPKTVKSRLEWKLGSRVSFVYQQTLQGD 60
 Db |||||
 QY 23 YKAYGFAPKDDQVVTAVYQEAIALACKTPKTVKSRLEWKLGSRVSFVYQQTLQGD 82
 Db |||||
 QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVAPSEQGNLEEDTVTLVL-----VAPVP 115
 Db |||||
 QY 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVAPSEQGNLEEDTVTLVLGDVHVLPAPVP 142
 Db |||||
 QY 116 SCEVPSSALSGTVVELRCQDKEGNAPEYTFPKDGIIRLENPRLGQSQTNSSTYTNKTKG 175
 Db |||||
 QY 143 SCEVPSSALSGTVVELRCQDKEGNAPEYTFPKDGIIRLENPRLGQSQTNSSTYTNKTKG 202
 Db |||||
 QY 176 TLQNTVSKLDTGEYSCARNVGVYRCPGKMGVDDNLNIGIIAAVVAALVISVCGIG 235
 Db |||||
 QY 203 TLQNTVSKLDTGEYSCARNVGVYRCPGKMGVDDNLNIGIIAAVVAALVISVCGIG 262
 Db |||||
 QY 236 VCYAQRKGFFSKETSFOKSNSSSKATTMSNDFFKTKSFII 276
 Db |||||
 QY 263 VCYAQRKGFFSKETSFOKSNSSSKATTMSNDFFKTKSFII 303
 Db |||||

RESULT 12
 AAY08060
 ID AAY08060 standard; Protein; 312 AA.
 XX
 AC AAY08060;
 XX
 DT 11-SEP-2000 (first entry)
 XX Human PRO245 protein.
 DE
 XX Inflammatory cell infiltration; immune response; T cell proliferation;
 KW anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthropathy;
 KW

KW T cell-mediated disease; spondyloarthropathy; sclerosis; renal disease;
 KW inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 KW diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 KW multiple sclerosis; polyneuropathy; hepatitis; cirrhosis; enteropathy;
 KW sclerosing cholangitis; inflammatory bowel disease; Whipple's disease;
 KW skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 KW food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 KW idiopathic pulmonary fibrosis; graft rejection; PRO245; human.
 XX
 OS Homo sapiens.
 XX WO9914241-A2.
 PN 25-MAR-1999.
 PD 17-SEP-1998; 98WO-US19437.
 XX 17-SEP-1997; 97US-0059119.
 PR 18-SEP-1997; 97US-0059263.
 PR 28-OCT-1997; 97US-0063550.
 PR 12-NOV-1997; 97US-0065186.
 PR 21-NOV-1997; 97US-0066364.
 PR 24-NOV-1997; 97US-0066770.
 PR 04-JUN-1998; 98US-0088026.
 XX (GETH) GENENTECH INC.
 PA Fong S, Goddard A, Gurney AL, Tumas D, Wood WI;
 XX WPI; 1999-229499/19.
 DR N-PSDB; AAX37664.
 XX Composition containing novel polypeptide PRO245, its agonist or
 PT antagonist -
 PT Example 1; Fig 2; 177pp; English.
 PS This invention describes a novel composition containing (apart from a
 CC carrier or excipient), a novel PRO245 polypeptide (I), its agonist or
 CC antagonist, or their fragments, for modulating: (i) infiltration of
 CC inflammatory cells into tissue; (ii) an immune response; or (iii) T cell
 CC proliferation. The composition increases or decreases any of the effects
 CC (i)-(iii). The products of the invention have anti-inflammatory,
 CC anti-autoimmune and anti-diabetic activity. (I), and its (antagonists
 CC and their fragments, are used to treat immune-related diseases,
 CC particularly T cell-mediated diseases. The diseases treated include
 CC systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
 CC arthritis, spondyloarthropathies, systemic sclerosis (scleroderma),
 CC idiopathic inflammatory myopathies (dermatomyositis, polymyositis),
 CC Sjogren's syndrome, systemic vasculitis, sarcoidosis, autoimmune
 CC hemolytic anemia (immune pancytopenia, paroxysmal nocturnal
 CC hemoglobinuria), autoimmune thrombocytopenia (idiopathic thrombocytopenic
 CC purpura immune-mediated thrombocytopenia), thyroiditis (Grave's disease,
 CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
 CC thyroiditis), diabetes mellitus, immune-mediated renal disease
 CC (glomerulonephritis, tubulointerstitial nephritis), multiple sclerosis,
 CC idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome, chronic
 CC inflammatory demyelinating polyneuropathy, infectious hepatitis
 CC (hepatitis A, B, C, D, E and other non-hepatotropic viruses), autoimmune
 CC hepatic active hepatitis, primary biliary cirrhosis, granulomatous
 CC hepatitis, and sclerosing cholangitis, inflammatory bowel disease
 CC (ulcerative colitis; Crohn's disease), gluten-sensitive enteropathy, and
 CC Whipple's disease. Autoimmune or immune-mediated skin diseases including
 CC bullous skin diseases, erythema multiforme, contact dermatitis, psoriasis,
 CC asthma, allergic rhinitis, atopic dermatitis, food hypersensitivity,
 CC urticaria, eosinophilic pneumonia, idiopathic pulmonary fibrosis,
 CC hypersensitivity pneumonitis, and transplant-associated diseases
 CC (graft rejection, and graft-versus-host-disease). (I), its (antagonists
 CC or fragment can also be used as an adjuvant in treatment of tumors.
 CC Antibodies against (I) can also be used for diagnosing such diseases.
 CC This sequence represents the human PRO245 protein described in the
 CC invention.

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SQ Sequence 312 AA;
Query Match 96.1%; Score 1362; DB 20; Length 312;
Best Local Similarity 99.2%; Pred. No. 5.3e-107;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDOQVVTAAYQAEAILACKTPKKTIVSRLEWKKLGRSVSFYVYQOTLQGD 60
DB 23 YHKAYGFSAPKDOQVVTAAYQAEAILACKTPKKTIVSRLEWKKLGRSVSFYVYQOTLQGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVAPVPSCEVP 142

QY 121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTYTNKTKGTILQFN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTYTNKTKGTILQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNISGIIAAVVVVALVISVCGLGVCYQA 240
DB 203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNISGIIAAVVVVALVISVCGLGVCYQA 262

QY 241 RKGYFSKETSFOKSNSSSKATTMSN 266
DB 263 RKGYFSKETSFOKSNSSSKATTMSN 288

RESULT 13
AAV23324
ID AAY23324 standard; Protein; 312 AA.
XX
AC AAY23324;
XX
DT 02-SEP-1999 (first entry)
XX
DE A33 related antigen PRO245.
XX
KW A33 related antigen; PRO301; PRO362; PRO245; inflammatory disease;
KW tumour.
XX
OS Homo sapiens.
XX
PN WO9927098-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-US24855.
XX
PR 17-SEP-1998; 98WO-US19437.
PR 21-NOV-1997; 97US-0066364.
PR 20-MAR-1998; 98US-0078936.
XX
PA (GETH ) GENENTECH INC.
XX
PI Ashkenazi A, Fong S, Goddard A, Gurney AL, Napier MA;
PI Tumas D, Wood WI;
XX
DR WPI: 1999-404743/34.
DR N-PSDB; AAX81770.
XX
PT Antigens PRO301, PRO362 and PRO245 related to A33
XX
PS Example 3; Fig 11; 122pp; English.
XX
CC The specification describes A33 related antigens PRO301, PRO362 and
CC PRO245. The methods and compositions of the invention are useful for the
CC treatment and diagnosis of inflammatory disease and tumours in mammals.
CC Such inflammatory diseases include of inflammatory bowel disease,
CC systemic lupus erythematosus, rheumatoid arthritis, juvenile chronic
CC arthritis, spondyloarthropathies, systemic sclerosis, scleroderma,
CC idiopathic inflammatory myopathies, dermatomyositis, polymyositis,
CC Sjogren's syndrome, systemic vacuolitis, sarcoidosis, autoimmune hemolytic
CC anemia, immune pancytopenia, paroxysmal nocturnal hemoglobinuria,

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CC autoimmune thrombocytopenia, idiopathic thrombocytopenic purpura,
CC immune-mediated thrombocytopenia, thyroiditis, Grave's disease,
CC Hashimoto's thyroiditis, juvenile lymphocytic thyroiditis, atrophic
CC thyroiditis, diabetes mellitus, immune-mediated renal disease,
CC glomerulonephritis, tubulointerstitial nephritis, demyelinating diseases
CC of the central and peripheral nervous systems such as multiple sclerosis,
CC idiopathic polyneuropathy, hepatobiliary diseases, infectious hepatitis,
CC A, B, C, D, E, nonhepatotropic viruses, autoimmune chronic active
CC hepatitis, primary biliary cirrhosis, granulomatous hepatitis, sclerosing
CC cholangitis, inflammatory and fibrotic lung diseases, gluten-sensitive
CC enteropathy, Whipple's disease, autoimmune or immune-mediated skin
CC diseases allergic diseases of the lung such as eosinophilic pneumonias,
CC idiopathic pulmonary fibrosis and hypersensitivity pneumonitis
CC transplantation associated diseases disease. The present sequence
CC represents PRO245.
XX
SQ Sequence 312 AA;

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Query Match 96.1%; Score 1362; DB 20; Length 312;
Best Local Similarity 99.2%; Pred. No. 5.3e-107;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 1 YHKAYGFSAPKDOQVVTAAYQAEAILACKTPKKTIVSRLEWKKLGRSVSFYVYQOTLQGD 60
DB 23 YHKAYGFSAPKDOQVVTAAYQAEAILACKTPKKTIVSRLEWKKLGRSVSFYVYQOTLQGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVAPVPSCEVP 142

QY 121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTYTNKTKGTILQFN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTYTNKTKGTILQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNISGIIAAVVVVALVISVCGLGVCYQA 240
DB 203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDNLNISGIIAAVVVVALVISVCGLGVCYQA 262

QY 241 RKGYFSKETSFOKSNSSSKATTMSN 266
DB 263 RKGYFSKETSFOKSNSSSKATTMSN 288

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RESULT 14
AAV13354
ID AAY13354 standard; Protein; 312 AA.
XX
AC AAY13354;
XX
DT 25-JUN-1999 (first entry)
XX
DE Amino acid sequence of protein PRO245.
XX
KW Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
XX
OS Homo sapiens.
XX
PN WO9914328-A2.
XX
PD 25-MAR-1999.
XX
PF 16-SEP-1998; 98WO-US19330.
XX
PR 25-NOV-1997; 97US-0066840.
PR 17-SEP-1997; 97US-0059113.
PR 17-SEP-1997; 97US-0059115.
PR 17-SEP-1997; 97US-0059117.

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PR 17-SEP-1997; 97US-00591119.
 PR 17-SEP-1997; 97US-00591121.
 PR 17-SEP-1997; 97US-00591122.
 PR 17-SEP-1997; 97US-00591184.
 PR 18-SEP-1997; 97US-00592263.
 PR 18-SEP-1997; 97US-00592266.
 PR 18-SEP-1997; 97US-0062125.
 PR 18-SEP-1997; 97US-0062285.
 PR 17-OCT-1997; 97US-0062287.
 PR 21-OCT-1997; 97US-0063486.
 PR 24-OCT-1997; 97US-0062814.
 PR 24-OCT-1997; 97US-0062816.
 PR 24-OCT-1997; 97US-0063045.
 PR 24-OCT-1997; 97US-0063120.
 PR 24-OCT-1997; 97US-0063121.
 PR 24-OCT-1997; 97US-0063127.
 PR 24-OCT-1997; 97US-0063128.
 PR 27-OCT-1997; 97US-0063329.
 PR 27-OCT-1997; 97US-0063327.
 PR 28-OCT-1997; 97US-0063541.
 PR 28-OCT-1997; 97US-0063542.
 PR 28-OCT-1997; 97US-0063544.
 PR 28-OCT-1997; 97US-0063549.
 PR 28-OCT-1997; 97US-0063550.
 PR 29-OCT-1997; 97US-0063564.
 PR 29-OCT-1997; 97US-0063435.
 PR 29-OCT-1997; 97US-0063704.
 PR 29-OCT-1997; 97US-0063732.
 PR 29-OCT-1997; 97US-0063738.
 PR 29-OCT-1997; 97US-0063734.
 PR 29-OCT-1997; 97US-0064215.
 PR 29-OCT-1997; 97US-0063735.
 PR 31-OCT-1997; 97US-0063870.
 PR 31-OCT-1997; 97US-0064103.
 PR 03-NOV-1997; 97US-0064248.
 PR 07-NOV-1997; 97US-0064809.
 PR 12-NOV-1997; 97US-0065186.
 PR 17-NOV-1997; 97US-0065846.
 PR 18-NOV-1997; 97US-0065693.
 PR 21-NOV-1997; 97US-0066120.
 PR 21-NOV-1997; 97US-0066364.
 PR 24-NOV-1997; 97US-0066772.
 PR 24-NOV-1997; 97US-0066466.
 PR 24-NOV-1997; 97US-0066770.
 PR 24-NOV-1997; 97US-0066511.
 PR 24-NOV-1997; 97US-0066453.
 PA (GETH) GENENTECH INC.
 PI Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
 DR N-PSDB; AAX52225.
 XX WPI; 1999-229533/19.
 DR New isolated human genes and polypeptides used in, e.g. treatment of
 PT gastrointestinal ulceration
 XX Claim 12; Fig 24; 320pp; English.
 PS AAY13344-403 represent secreted and transmembrane human proteins.
 CC The cDNA sequences are obtained from cDNA libraries, prepared from
 CC fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
 CC The encoded polypeptides have specific uses based on their homology to
 CC known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
 CC associated with the preservation and maintenance of gastrointestinal
 CC mucosa and the repair of acute and chronic mucosal lesions
 CC (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
 CC ulceration and congenital microvillus atrophy), skin diseases associated
 CC with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
 CC cancers such as lung squamous cell carcinoma of the vulva and gliomas),
 CC potent effects on cell growth and development, diseases related to
 CC growth or survival of nerve cells including Parkinson's disease,
 CC Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as

CC for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used
 CC as a target for anti-tumor drugs. PRO533 may be used in the treatment
 CC of Usher Syndrome or Atrophia areata; PRO269 can be used as an
 CC anti-thrombotic agent; PRO287 polypeptides and portions may have
 CC therapeutic applications in wound healing and tissue repair; PRO317 can
 CC be used for treating problems of the kidney, uterus, endometrium, blood
 CC vessels, or related tissue, e.g. in the heart of genital tract.
 XX

SQ Sequence 312 AA;

Query Match 96.1%; Score 1362; DB 20; Length 312;
 Best Local Similarity 99.2%; Pred. No. 5.3e-107;
 Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKQDVVAVYQEAAILACKTPKKTIVSRLEWKLGSRVSFVYQOTLQGD 60
 |||||
 DB 23 YHKAYGFSAPKQDVVAVYQEAAILACKTPKKTIVSRLEWKLGSRVSFVYQOTLQGD 82
 |||||
 QY 61 FKRAEMIDFNIRIKNVTSDAGKYRCEVSAPESEQGNLEEDTTLVLVAVAPVPSCEVP 120
 |||||
 DB 83 FKRAEMIDFNIRIKNVTSDAGKYRCEVSAPESEQGNLEEDTTLVLVAVAPVPSCEVP 142
 |||||
 QY 121 SSALSGTVVELRCQDKGNPAPEYTFWFKGIRLLENPRLGQSTNSYTNWTKTGLQFN 180
 |||||
 DB 143 SSALSGTVVELRCQDKGNPAPEYTFWFKGIRLLENPRLGQSTNSYTNWTKTGLQFN 202
 |||||
 QY 181 TVSKLDTGEYSCERNVSVYRCPGKRMQVDDNIGITIAAVVVVALVISCGLGVGYAQ 240
 |||||
 DB 203 TVSKLDTGEYSCERNVSVYRCPGKRMQVDDNIGITIAAVVVVALVISCGLGVGYAQ 262
 |||||
 QY 241 RKGYSFKETSFQKSNSSSKATTMSEN 266
 |||||
 DB 263 RKGYSFKETSFQKSNSSSKATTMSEN 288
 |||||

RESULT 15

AAB33421

ID AAB33421 standard; Protein; 312 AA.

AC AAB33421;

XX 29-JAN-2001 (first entry)

DT Human PRO245 protein UNQ219 SEQ ID NO.36.

KW Human; immune related disease; diagnosis; antiinflammatory; cardiant;
 KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
 KW haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
 KW antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic;
 KW antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis;
 KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
 KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
 KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
 KW autoimmune thrombocytopenia; immune-mediated renal disease;
 KW demyelinating disease; hepatobiliary disease; Whipple's disease;
 KW inflammatory bowel disease; gluten-sensitive enteropathy;
 KW autoimmune disease; immune-mediated skin disease; allergic disease;
 KW immunological disease; transplantation associated disease;
 KW graft rejection; Graft-versus-host-disease.

OS Homo sapiens.

XX WO2000053759-A2.

PN 14-SEP-2000.

XX 02-MAR-2000; 2000WO-US05841.

XX 08-MAR-1999; 99WO-US05028.

PR 10-MAR-1999; 99US-0123618.

PR 12-MAR-1999; 99US-0123957.

PR 23-MAR-1999; 99US-0125775.

PR 12-APR-1999; 99US-0128849.

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PR 20-APR-1999; 99WO-US08615.
PR 28-APR-1999; 99US-0131445.
PR 04-MAY-1999; 99US-0132371.
PR 14-MAY-1999; 99US-0134287.
PR 02-JUN-1999; 99WO-US12252.
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 28-JUL-1999; 99US-0146222.
PR 01-SEP-1999; 99WO-US20111.
PR 08-SEP-1999; 99WO-US20594.
PR 13-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 15-SEP-1999; 99WO-US21547.
PR 05-OCT-1999; 99WO-US23089.
PR 29-OCT-1999; 99US-0162506.
PR 29-NOV-1999; 99WO-US28214.
PR 30-NOV-1999; 99WO-US28313.
PR 30-NOV-1999; 99WO-US28409.
PR 01-DEC-1999; 99WO-US28301.
PR 02-DEC-1999; 99WO-US28634.
PR 02-DEC-1999; 99WO-US28551.
PR 02-DEC-1999; 99WO-US28564.
PR 02-DEC-1999; 99WO-US28565.
PR 16-DEC-1999; 99WO-US30095.
PR 20-DEC-1999; 99WO-US30999.
PR 30-DEC-1999; 99WO-US31274.
PR 05-JAN-2000; 2000WO-US00219.
PR 06-JAN-2000; 2000WO-US00277.
PR 06-JAN-2000; 2000WO-US00376.
PR 11-FEB-2000; 2000WO-US03565.
PR 18-FEB-2000; 2000WO-US04341.
PR 18-FEB-2000; 2000WO-US04342.
PR 22-FEB-2000; 2000WO-US04414.
PA (GETH ) GENENTECH INC.
XX
XX
PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
XX
XX MPI; 2000-57271/53.
XX N-PSDB; AAC58586.
XX
XX Sixty four PRO polypeptides, useful in the diagnosis and treatment of
XX immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
XX arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
XX
XX Claim 33; Fig 16; 309pp; English.
XX
XX The present invention describes sixty four human PRO proteins which can
XX be used in the treatment of immune related diseases. The human PRO
XX proteins, anti-PRO antibodies, agonists and antagonists are useful for
XX treating and diagnosing immune related disorders. The disorders are
XX selected from systemic lupus erythematosus, rheumatoid arthritis,
XX osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
XX systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
XX syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
XX anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,
XX immune-mediated renal disease, demyelinating diseases of the central
XX and peripheral nervous systems, hepatobiliary diseases, inflammatory
XX bowel disease, gluten-sensitive enteropathy and Whipple's disease,
XX autoimmune or immune-mediated skin diseases, allergic diseases,
XX immunological diseases of the lung, and transplantation associated
XX diseases including graft rejection and graft-versus-host-disease.
XX AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
XX in the isolation of human PRO sequences. AAC58579 to AAC58642 and
XX AAB33414 to AAB33477 represent human PRO polynucleotide and protein
XX sequences given in the exemplification of the present invention.
XX
XX Sequence 312 AA;
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Query Match 96.1%; Score 1362; DB 21; Length 312;

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Best Local Similarity 99.2%; Pred. No. 5.3e-107;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 YHKAYGFSAPKDDQVVTVAVYQEAAILACKTPKKTVXSRLEWKLGSRVSFVYYQQTLOGD 60
Db 23 YHKAYGFSAPKDDQVVTVAVYQEAAILACKTPKKTVSSRLEWKLGSRVSFVYYQQTLOGD 82
Qy 61 FKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSQGNLEEDTVTLEVLVAPVPSCEVP 120
Db 83 FKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSQGNLEEDTVTLEVLVAPVPSCEVP 142
Qy 121 SSALSGTVVELRCQDKEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTYTNKTGTLQFN 180
Db 143 SSALSGTVVELRCQDKEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTYTNKTGTLQFN 202
Qy 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDNLNISGIIAAVWVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDNLNISGIIAAVWVVALVISVCGLGVCYQAQ 262
Qy 241 RKGYSKETSFOKSNSSSKATTWSEN 266
Db 263 RKGYSKETSFOKSNSSSKATTWSEN 288
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Search completed: December 9, 2003, 17:11:13
Job time : 37.5436 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:10:36 ; Search time 14.4251 Seconds
(without alignments)
809.548 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

Sequence: 1 YHKAYGFSAPKDDQVVAVX.....SSKATTMBNDFKHTKSFII 276

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 328717 seqs, 42310858 residues

Total number of hits satisfying chosen parameters: 328717

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

1: /cgn2_6/prodata/1/iaa/5A COMB.pap.*
2: /cgn2_6/prodata/1/iaa/5B COMB.pap.*
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4: /cgn2_6/prodata/1/iaa/6B COMB.pap.*
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6: /cgn2_6/prodata/1/iaa/backfile1.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	DB ID	Description
1	1414	99.7	298	4 US-09-152-060-76
2	1362	96.1	312	4 US-09-254-465A-9
3	426	30.0	299	3 US-09-188-930-189
4	426	30.0	299	3 US-09-188-930-331
5	426	30.0	299	4 US-09-462-270-2
6	426	30.0	299	4 US-09-254-465A-1
7	426	30.0	299	4 US-09-312-283C-189
8	426	30.0	299	4 US-09-312-283C-331
9	410	28.9	300	4 US-09-254-465A-10
10	399	28.1	260	4 US-09-254-465A-23
11	399	28.1	263	4 US-09-254-465A-25
12	268.5	18.9	205	4 US-09-462-270-4
13	231	16.3	270	4 US-09-254-465A-24
14	231	16.3	273	4 US-09-254-465A-26
15	231	16.3	319	1 US-08-597-495B-22
16	231	16.3	319	3 US-09-068-051A-22
17	231	16.3	319	4 US-09-336-536-67
18	231	16.3	319	4 US-09-254-465A-6
19	219	15.4	318	3 US-09-068-051A-32
20	210	14.8	387	4 US-09-175-928-2
21	200	14.1	341	4 US-09-336-536-29
22	200	14.1	370	4 US-09-336-536-28
23	198	14.0	390	2 US-08-979-424-1
24	196	13.8	365	4 US-09-336-536-40
25	196	13.8	394	4 US-09-336-536-39
26	190.5	13.4	352	4 US-09-996-243-505
27	190.5	13.4	365	2 US-08-979-424-3

28	190.5	13.4	365	3 US-09-272-496-2	Sequence 2, Appli
29	186.5	13.2	365	3 US-08-928-383B-2	Sequence 2, Appli
30	183	12.9	365	3 US-08-928-383B-23	Sequence 21, Appl
31	183	12.9	365	3 US-08-928-383B-24	Sequence 24, Appl
32	180	12.7	365	3 US-08-928-383B-26	Sequence 26, Appl
33	178.5	12.6	246	4 US-09-336-536-31	Sequence 31, Appl
34	177.5	12.5	249	4 US-09-336-536-42	Sequence 42, Appl
35	175.5	12.4	466	4 US-09-604-107A-8	Sequence 8, Appli
36	160.5	11.3	805	3 US-08-985-526-34	Sequence 34, Appl
37	160.5	11.3	806	2 US-08-443-861-5	Sequence 5, Appli
38	160.5	11.3	806	3 US-08-193-829B-5	Sequence 5, Appli
39	160.5	11.3	1367	1 US-07-813-593-4	Sequence 4, Appli
40	160.5	11.3	1367	1 US-07-977-451-6	Sequence 6, Appli
41	160.5	11.3	1367	1 US-07-946-507-4	Sequence 4, Appli
42	160.5	11.3	1367	1 US-08-252-517-6	Sequence 6, Appli
43	160.5	11.3	1367	1 US-07-906-397A-6	Sequence 6, Appli
44	160.5	11.3	1367	1 US-08-601-891-6	Sequence 6, Appli
45	160.5	11.3	1367	2 US-08-443-861-2	Sequence 2, Appli

ALIGNMENTS

RESULT 1

US-09-152-060-76
; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P1.US
; CURRENT APPLICATION NUMBER: US/09/152,060
; CURRENT FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,368
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

Query Match 99.7%; Score 1414; DB 4; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.4e-130;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	YHKAYGFSAPKDDQVVVAVXYQEAII	LAC	KTP	PKK	TVX	SR	LEW	KL	GR	SV	SV	FV	YV	Q	T	L	Q	60
Db	23	YHKAYGFSAPKDDQVVVAVXYQEAII	LAC	KTP	PKK	TVX	SR	LEW	KL	GR	SV	SV	FV	YV	Q	T	L	Q	82
Qy	61	FKNRAEMIDFNI	R	IKNV	TR	S	D	A	G	K	V	C	E	V	S	A	P	S	120
Db	83	FKNRAEMIDFNI	R	IKNV	TR	S	D	A	G	K	V	C	E	V	S	A	P	S	142
Qy	121	SSALS	G	T	V	E	L	R	C	O	D	K	E	N	P	A	P	E	180
Db	143	SSALS	G	T	V	E	L	R	C	O	D	K	E	N	P	A	P	E	202
Qy	181	TVSKL	D	T	G	E	S	C	E	A	R	N	S	V	G	Y	R	C	240
Db	203	TVSKL	D	T	G	E	S	C	E	A	R	N	S	V	G	Y	R	C	262
Qy	241	RKGYFSK	E	T	S	F	O	K	N	S	S	S	K	A	T	T	M	S	276
Db	263	RKGYFSK	E	T	S	F	O	K	N	S	S	S	K	A	T	T	M	S	298

RESULT 2
US-09-254-465A-9
; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1 (US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Qy 241 RKGYSKETSFKNSNSSKATTMSSEN 266
Db 263 RKGYSKETSFKNSNSSKATTMSSEN 288

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RESULT 3
US-09-188-930-189
; Sequence 189, Application US/09188930A
; Patent No. 6150502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James Greg
; TITLE OF INVENTION: Compositions Isolated
; TITLE OF INVENTION: and Methods For Their
; FILE REFERENCE: ll000.101c1
; CURRENT APPLICATION NUMBER: US/09/188,930A
; CURRENT FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 348
; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 189
; LENGTH: 299
; TYPE: PR1
; ORGANISM: Human
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (247)... (247)
; NAME/KEY: UNSURE
; LOCATION: (289)... (289)
US-09-188-930-189

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RESULT 4
US-09-188-930-331
; Sequence 331, Application US/09188930A
; Patent No.: 610502
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Orrust, Rene
; APPLICANT: Murison, James Greg
; TITLE OF INVENTION: Compositions Isolated From Skin Cells
; TITLE OF INVENTION: and Methods For Their Use
; FILE REFERENCE: 11000.1011c1
; CURRENT APPLICATION NUMBER: US/09/188.930A

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; CURRENT FILING DATE: 1998-11-09
; NUMBER OF SEQ ID NOS: 348
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 331
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Human
US-09-188-930-331

Query Match
Best Local Similarity 30.0%; Score 426; DB 3; Length 299;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKDDQOVVAVXYQEAAILACKTPKKTXXSRLEWK-KLGRSVSFVYYQQTLOGDF 61
Db 51 AYSGFSSP-----RVEWKFDQDGTTRLVCPYNNKITASY 83
QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQONLEEDVTLEVLVAPVPSCEVPS 121
Db 84 EDRVTFPLPTGTFKSVTRDGTGYTCMVS--BEGGNSYGEVKVYKLVLPVPPSKPTVNI 141
QY 122 SALSGTVVVELRCODKEGNPAPEYTFWKDGIRLLENPRLGQSSTNSSTYTNWTKTGLQFNT 181
Db 142 SATIGNRAVLTCSEQDGGSPSEYTFWKDGIWMTNPKSTRAFSNSSYVLPNPTTGLVDFP 201
QY 182 VSKLDTGYSCEARNVGYRRCPCGK-RMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 240
Db 262 SRGHFDRT---KKGTSKKVIYQPSARSEGEFKQTSSFLV 299

RESULT 5
US-09-462-270-2
; Sequence 2, Application US/09462270
; Patent No. 6358707
; GENERAL INFORMATION:
; APPLICANT: SmithKline Beecham Corporation
; TITLE OF INVENTION: Human Flt Antigen: A Cell Surface
; FILE REFERENCE: Receptor Involved in Platelet Aggregation
; CURRENT APPLICATION NUMBER: US/09/462,270
; PRIOR FILING DATE: 2000-01-05
; PRIOR APPLICATION NUMBER: 60/052,186
; PRIOR FILING DATE: 1997-07-10
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 299
; TYPE: PRT
; ORGANISM: HOMO SAPIENS
US-09-462-270-2

Query Match
Best Local Similarity 30.0%; Score 426; DB 4; Length 299;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKDDQOVVAVXYQEAAILACKTPKKTXXSRLEWK-KLGRSVSFVYYQQTLOGDF 61
Db 51 AYSGFSSP-----RVEWKFDQDGTTRLVCPYNNKITASY 83
QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQONLEEDVTLEVLVAPVPSCEVPS 121
Db 84 EDRVTFPLPTGTFKSVTRDGTGYTCMVS--BEGGNSYGEVKVYKLVLPVPPSKPTVNI 141
QY 122 SALSGTVVVELRCODKEGNPAPEYTFWKDGIRLLENPRLGQSSTNSSTYTNWTKTGLQFNT 181
Db 142 SATIGNRAVLTCSEQDGGSPSEYTFWKDGIWMTNPKSTRAFSNSSYVLPNPTTGLVDFP 201
QY 182 VSKLDTGYSCEARNVGYRRCPCGK-RMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 240
Db 262 SRGHFDRT---KKGTSKKVIYQPSARSEGEFKQTSSFLV 299

RESULT 6
US-09-254-465A-1
; Sequence 1, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 1
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-1

Query Match
Best Local Similarity 30.0%; Score 426; DB 4; Length 299;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKDDQOVVAVXYQEAAILACKTPKKTXXSRLEWK-KLGRSVSFVYYQQTLOGDF 61
Db 51 AYSGFSSP-----RVEWKFDQDGTTRLVCPYNNKITASY 83
QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOGQONLEEDVTLEVLVAPVPSCEVPS 121
Db 84 EDRVTFPLPTGTFKSVTRDGTGYTCMVS--BEGGNSYGEVKVYKLVLPVPPSKPTVNI 141
QY 122 SALSGTVVVELRCODKEGNPAPEYTFWKDGIRLLENPRLGQSSTNSSTYTNWTKTGLQFNT 181
Db 142 SATIGNRAVLTCSEQDGGSPSEYTFWKDGIWMTNPKSTRAFSNSSYVLPNPTTGLVDFP 201
QY 182 VSKLDTGYSCEARNVGYRRCPCGK-RMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 240
Db 262 SRGHFDRT---KKGTSKKVIYQPSARSEGEFKQTSSFLV 299

RESULT 7
US-09-312-283C-189
; Sequence 189, Application US/09312283C
; Patent No. 6573095
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
```

```

; APPLICANT: Onrust, Rene
; APPLICANT: Murison, James G.
; APPLICANT: Kumble, Krishanand D.
; TITLE OF INVENTION: Compositions Isolated from Skin Cells
; TITLE OF INVENTION: and Methods for Their Use
; FILE REFERENCE: 11000.1011c2
; CURRENT APPLICATION NUMBER: US/09/312,283C
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 425
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 189
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Mouse
US-09-312-283C-189

Query Match 30.0%; Score 426; DB 4; Length 299;
Best Local Similarity 35.6%; Pred. No. 1e-33;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKQOVVAVXQYQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOTLQDGF 61
DB 51 AYSGFSSP-----RVEWKFQDGTTRLVCYNNKITASY 83

QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTVTLEVLVAPVAPVPSCEVPS 121
DB 84 EDRTVFLPTGTFKSVTRDGTGYTCWVS--BEGGNSYGEVKVLVLVPPSKPTVNIIPS 141

QY 122 SALSQVTVVELRCQDKEGNPAPYTFWKDGIRLLENPRLGSSQSTNSSYTMTKTGTLOQFNT 181
DB 142 SATIGNRAVLTCSEQDGGPPSEYTFWKDGIWPTNPKSTRAFNSSYVNLPTTGLVFPDP 201

QY 182 VSKLDTGEYSCARNVGVYRRCPCGK-RMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAO 240
DB 202 LSASDTGEYSCARNVGVYRRCPCGK-RMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAO 240

QY 241 RKGYSKETSFOKSNSSSKA-----TTMSENDFKHTKSFII 276
DB 262 SRGHFDRT---KKGTSKKVIYQSPARSSEGEFKQTSFLV 299

RESULT 8
US-09-312-283C-331
; Sequence 331, Application US/09312283C
; Patent No. 6573095
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Kumble, Krishanand D.
; APPLICANT: Murison, James G.
; TITLE OF INVENTION: Compositions Isolated from Skin Cells
; TITLE OF INVENTION: and Methods for Their Use
; FILE REFERENCE: 11000.1011c2
; CURRENT APPLICATION NUMBER: US/09/312,283C
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 425
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 331
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Mouse
US-09-312-283C-331

Query Match 30.0%; Score 426; DB 4; Length 299;
Best Local Similarity 35.6%; Pred. No. 1e-33;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKQOVVAVXQYQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOTLQDGF 61
DB 51 AYSGFSSP-----RVEWKFQDGTTRLVCYNNKITASY 83

QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTVTLEVLVAPVAPVPSCEVPS 121
DB 84 EDRTVFLPTGTFKSVTRDGTGYTCWVS--BEGGNSYGEVKVLVLVPPSKPTVNIIPS 141

QY 122 SALSQVTVVELRCQDKEGNPAPYTFWKDGIRLLENPRLGSSQSTNSSYTMTKTGTLOQFNT 181
DB 142 SATIGNRAVLTCSEQDGGPPSEYTFWKDGIWPTNPKSTRAFNSSYVNLPTTGLVFPDP 201

QY 182 VSKLDTGEYSCARNVGVYRRCPCGK-RMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAO 240
DB 202 LSASDTGEYSCARNVGVYRRCPCGK-RMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAO 240

QY 241 RKGYSKETSFOKSNSSSKA-----TTMSENDFKHTKSFII 276
DB 262 SRGHFDRT---KKGTSKKVIYQSPARSSEGEFKQTSFLV 299

RESULT 8
US-09-312-283C-331
; Sequence 331, Application US/09312283C
; Patent No. 6573095
; GENERAL INFORMATION:
; APPLICANT: Watson, James D.
; APPLICANT: Strachan, Lorna
; APPLICANT: Sleeman, Matthew
; APPLICANT: Onrust, Rene
; APPLICANT: Kumble, Krishanand D.
; APPLICANT: Murison, James G.
; TITLE OF INVENTION: Compositions Isolated from Skin Cells
; TITLE OF INVENTION: and Methods for Their Use
; FILE REFERENCE: 11000.1011c2
; CURRENT APPLICATION NUMBER: US/09/312,283C
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 425
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 331
; LENGTH: 299
; TYPE: PRT
; ORGANISM: Mouse
US-09-312-283C-331

Query Match 30.0%; Score 426; DB 4; Length 299;
Best Local Similarity 35.6%; Pred. No. 1e-33;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKQOVVAVXQYQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOTLQDGF 61
DB 51 AYSGFSSP-----RVEWKFQDGTTRLVCYNNKITASY 83

QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTVTLEVLVAPVAPVPSCEVPS 121
DB 84 EDRTVFLPTGTFKSVTRDGTGYTCWVS--BEGGNSYGEVKVLVLVPPSKPTVNIIPS 141

QY 122 SALSQVTVVELRCQDKEGNPAPYTFWKDGIRLLENPRLGSSQSTNSSYTMTKTGTLOQFNT 181
DB 142 SATIGNRAVLTCSEQDGGPPSEYTFWKDGIWPTNPKSTRAFNSSYVNLPTTGLVFPDP 201

QY 182 VSKLDTGEYSCARNVGVYRRCPCGK-RMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAO 240
DB 202 LSASDTGEYSCARNVGVYRRCPCGK-RMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAO 240

QY 241 RKGYSKETSFOKSNSSSKA-----TTMSENDFKHTKSFII 276
DB 262 SRGHFDRT---KKGTSKKVIYQSPARSSEGEFKQTSFLV 299

RESULT 9
US-09-254-465A-10
; Sequence 10, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P121GRI(US)
; CURRENT APPLICATION NUMBER: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 10
; LENGTH: 300
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-254-465A-10

Query Match 28.9%; Score 410; DB 4; Length 300;
Best Local Similarity 35.9%; Pred. No. 3.7e-32;
Matches 99; Conservative 49; Mismatches 116; Indels 12; Gaps 6;

QY 7 FSAPKQOVVAVXQYQAILACKTPKTVXSRLEWK-KLGRSVSFVYQOTLQDGFKNRA 65
DB 31 YTAQSDVQVPE-----NESIKLTCTYSGFSSPRVWKVQGSTTALVCYNSQITAPYADRV 86

QY 66 EMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTVTLEVLVAPVAPVPSCEVPS 125
DB 87 TFSSTGTFSSVTRKNGEYTCWVS--BEGGQNYGEVSIHLTVLVPSPKPTISVPSSVTI 144

QY 126 GTVVVELRCQDKEGNPAPYTFWKDGIRLLENPRLGSSQSTNSSYTMTKTGTLOQFNTVSK 184
DB 145 GNRVLTCSEHDGSPSEYTFWKDGIWPTNPKSTRAFNSSYVNLPTTGLVFPDPVTA 204

QY 185 LDTGEYSCARNVGVYRRCPCGK-RMQVDDLNISGIIAAVVVVALVISVCGLGVCYQAO 243
DB 205 FDSGEYTCQNGVGTAMRSEAAHMDAVELNMGVGVVAAVLVTLILLGLLIFGVWFAYS 264

QY 244 YF---SKETSFOKSNSSSKATMTMSENDFKHTKSFII 276
DB 265 YFETTKGTAPKGVYIYQSPSTRSEGEFKQTSFLV 300
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RESULT 10
US-09-254-465A-23
; Sequence 23, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Pong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 23
; LENGTH: 260
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-23

Query Match      28.1%; Score 399; DB 4; Length 260;
Best Local Similarity 35.5%; Pred. No. 3.6e-31;
Matches 94; Conservative 39; Mismatches 96; Indels 36; Gaps 6;

QY 4 AY-GFSAPKQQVVTAVXYQAEAILACKTPKTVXSRLEWK-KLGRSVSFVYQQTLQGD 61
Db 31 AYSGFSSP-----RVEWKFQDGTTRLVCYNNKITASY 63
QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLSEEDTVTLEVLVAPVPSCEVPS 121
Db 64 EDRVTFLLPTGTTFKSVTRDGTGTYTCWVS--EEGNSYGEVKVKLVLPSPKPTVNIPS 121
QY 122 SALSCTVVELRCQDKEGNPAPETWFKDGIRLLENPRLGQSQTNSYTNWTKTGLQFNT 181
Db 122 SATIGNRAVLTCSEQDGGSPSEYTWFKDGIWPTNPKSTRAPSNSSYVLNPTTGLVFPDP 181
QY 182 VSKLDTGEYSCEARNSVGYRRCPGK-RMQVDDLNTSGIIAAVVVALVSVCGLVGYCYAQ 240
Db 182 LSASDTGEYSCEARNGYGTPTMTSNVRAVEARNVGVVAAVLTLILGILVFGIWFAY 241
QY 241 RKGYSKETSFKNSSSSKATTMSE 265
Db 239 SRGHFDR----TKKGTSSKKVIYSQ 259

RESULT 11
US-09-254-465A-25
; Sequence 25, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 25
; LENGTH: 263
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-25

Query Match      28.1%; Score 399; DB 4; Length 263;
Best Local Similarity 35.5%; Pred. No. 3.7e-31;
Matches 94; Conservative 39; Mismatches 96; Indels 36; Gaps 6;

QY 4 AY-GFSAPKQQVVTAVXYQAEAILACKTPKTVXSRLEWK-KLGRSVSFVYQQTLQGD 61
Db 31 AYSGFSSP-----RVEWKFQDGTTRLVCYNNKITASY 63
QY 62 KNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLSEEDTVTLEVLVAPVPSCEVPS 121
Db 64 EDRVTFLLPTGTTFKSVTRDGTGTYTCWVS--EEGNSYGEVKVKLVLPSPKPTVNIPS 121
QY 122 SALSCTVVELRCQDKEGNPAPETWFKDGIRLLENPRLGQSQTNSYTNWTKTGLQFNT 181
Db 122 SATIGNRAVLTCSEQDGGSPSEYTWFKDGIWPTNPKSTRAPSNSSYVLNPTTGLVFPDP 181
QY 182 VSKLDTGEYSCEARNSVGYRRCPGK-RMQVDDLNTSGIIAAVVVALVSVCGLVGYCYAQ 240
Db 182 LSASDTGEYSCEARNGYGTPTMTSNVRAVEARNVGVVAAVLTLILGILVFGIWFAY 241
QY 241 RKGYSKETSFKNSSSSKATTMSE 265
Db 242 SRGHFDR----TKKGTSSKKVIYSQ 262

RESULT 12
US-09-462-270-4
; Sequence 4, Application US/09462270
; Patent No. 6358707
; GENERAL INFORMATION:
; APPLICANT: SmithKline Beecham Corporation
; TITLE OF INVENTION: Human FII Antigen: A Cell Surface
; FILE REFERENCE: GH-70150US
; CURRENT APPLICATION NUMBER: US/09/462,270
; CURRENT FILING DATE: 2000-01-05
; PRIOR APPLICATION NUMBER: 60/052,186
; PRIOR FILING DATE: 1997-07-10
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 205
; TYPE: PRT
; ORGANISM: HOMO SAPIENS
US-09-462-270-4

Query Match      18.9%; Score 268.5; DB 4; Length 205;
Best Local Similarity 35.6%; Pred. No. 1.6e-18;
Matches 64; Conservative 22; Mismatches 63; Indels 31; Gaps 4;

QY 4 AY-GFSAPKQQVVTAVXYQAEAILACKTPKTVXSRLEWK-KLGRSVSFVYQQTLQGD 61
Db 51 AYSGFSSP-----RVEWKFQDGTTRLVCYNNKITASY 83
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RESULT 13
US-09-254-465A-24
; Sequence 24, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 24
; LENGTH: 270
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-24

RESULT 14
US-09-254-465A-26
; Sequence 26, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:

; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi J.
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Napier, Mary A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Wood, William I.
 ; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
 ; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
 ; FILE REFERENCE: P1216R1(US)
 ; CURRENT APPLICATION NUMBER: US/09/254,465A
 ; CURRENT FILING DATE: 1999-03-05
 ; PRIOR APPLICATION NUMBER: PCT/US98/24855
 ; PRIOR FILING DATE: 1998-11-20
 ; PRIOR APPLICATION NUMBER: US 60/066,364
 ; PRIOR FILING DATE: 1997-11-21
 ; PRIOR APPLICATION NUMBER: US 60/078,936
 ; PRIOR FILING DATE: 1998-03-20
 ; PRIOR APPLICATION NUMBER: PCT/US98/19437
 ; PRIOR FILING DATE: 1998-09-17
 ; NUMBER OF SEQ ID NOS: 30
 ; SEQ ID NO 26
 ; LENGTH: 273
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-254-465A-26

RESULT 15
 US-08-597-495B-22
 ; Sequence 22, Application US/08597495B
 ; Patent No. 5712369
 ; GENERAL INFORMATION:
 ; APPLICANT: Old, Lloyd J.; Welt, Sydney; Ritter, Gerd;
 ; APPLICANT: Simpson, Richard J.; Nice, Edouard; Moritz, R. L.;
 ; APPLICANT: Catimel, B.; Ji, Hong; Burgess, Anthony W.;
 ; APPLICANT: Heath, Joan K.; White, Sara J.; Johnstone, Cameron
 ; TITLE OF INVENTION: Colon Cell And Colon Cancer Cell
 ; TITLE OF INVENTION: Associated Nucleic Acid Molecules, Protein And Peptides
 ; NUMBER OF SEQUENCES: 29
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Felfe & Lynch
 ; STREET: 805 Third Avenue
 ; CITY: New York City
 ; STATE: New York
 ; COUNTRY: USA
 ; ZIP: 10022
 ; COMPUTER READABLE FORM:

; MEDIUM TYPE: Diskette, 3.5 inch, 360 kb storage
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: Wordperfect
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/597,495B
; FILING DATE: 02-Feb-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/511,876
; FILING DATE: 04-Aug-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Hanson, No. 5712369man D.
; REGISTRATION NUMBER: 30,946
; REFERENCE/DOCKET NUMBER: LUD 5316.1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 688-9200
; TELEFAX: (212) 838-3884
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 319 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
;
US-08-597-495B-22
Query Match 16.3%; Score 231; DB 1; Length 319;
Best Local Similarity 28.6%; Pred. No. 1.4e-14;
Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;

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Db 23 SVETPDVLRASQGGKSVTLPC-TYHTSTSSREGLIQDKLLLTHTRVVIWPFNSKNYIH 81

Qy 59 GD-FKNR-----AEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDT---VTLEV 108
Db 82 GELYKNRVISINNAEQSDASITIDLTWADNGTYECSVLSMSD-----LEGNTKSRVRLV 137

Qy 109 LVAPAVPSCVPSSALSQTVVELRCQDKEGNPAPETWFKDGIRLLENPRLGSOQSTNSSY 168
Db 138 LVPPSKPCGIEGETIIGNNIQLTCQSKEGSPTPOYSWKRYNILNMQEQLAPASGQPVS 197

Qy 169 TMTTKTGTLOFNTVSKLDTGEYSCEARNVGYRCP-GRMQVDDLNIS-----GIIA 220
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Qy 221 AVVVVALVIVC 232
Db 248 ALIIIGIIYCC 259

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Job time : 14.4251 secs

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Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

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Post-processing: Minimum Match 0%

Maximum Match 100%

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	1415	99.8	298	16	US-10-192-791-2
5	1414	99.7	298	9	US-09-853-161-76
6	1414	99.7	298	9	US-09-852-659A-76
7	1414	99.7	298	10	US-09-852-797-76
8	1362	96.1	312	10	US-09-909-320-64
9	1362	96.1	312	10	US-09-909-088B-64
10	1362	96.1	312	10	US-09-905-291A-64
11	1362	96.1	312	10	US-09-953-499-9
12	1362	96.1	312	10	US-09-902-853-64
13	1362	96.1	312	10	US-09-907-824-64
14	1362	96.1	312	10	US-09-907-841-64
15	1362	96.1	312	11	US-09-904-011-64

16	1362	96.1	312	11	US-09-906-742-64	Sequence 64, Appl
17	1362	96.1	312	11	US-09-906-838-64	Sequence 64, Appl
18	1362	96.1	312	11	US-09-907-613-64	Sequence 64, Appl
19	1362	96.1	312	11	US-09-907-942-64	Sequence 64, Appl
20	1362	96.1	312	11	US-09-904-859-64	Sequence 64, Appl
21	1362	96.1	312	11	US-09-909-204-64	Sequence 64, Appl
22	1362	96.1	312	11	US-09-904-820-64	Sequence 64, Appl
23	1362	96.1	312	11	US-09-904-786-64	Sequence 64, Appl
24	1362	96.1	312	11	US-09-906-546-64	Sequence 64, Appl
25	1362	96.1	312	11	US-09-906-700-64	Sequence 64, Appl
26	1362	96.1	312	11	US-09-903-786-64	Sequence 64, Appl
27	1362	96.1	312	11	US-09-902-903-64	Sequence 64, Appl
28	1362	96.1	312	11	US-09-903-749A-64	Sequence 64, Appl
29	1362	96.1	312	11	US-09-904-119-64	Sequence 64, Appl
30	1362	96.1	312	11	US-09-904-556-64	Sequence 64, Appl
31	1362	96.1	312	11	US-09-902-736-64	Sequence 64, Appl
32	1362	96.1	312	11	US-09-907-794-64	Sequence 64, Appl
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37	1362	96.1	312	11	US-09-903-520-64	Sequence 64, Appl
38	1362	96.1	312	11	US-09-905-056-64	Sequence 64, Appl
39	1362	96.1	312	11	US-09-909-064-64	Sequence 64, Appl
40	1362	96.1	312	11	US-09-904-553-64	Sequence 64, Appl
41	1362	96.1	312	11	US-09-905-381-64	Sequence 64, Appl
42	1362	96.1	312	11	US-09-905-088-64	Sequence 64, Appl
43	1362	96.1	312	11	US-09-907-575-64	Sequence 64, Appl
44	1362	96.1	312	11	US-09-905-075-64	Sequence 64, Appl
45	1362	96.1	312	11	US-09-902-759-64	Sequence 64, Appl

ALIGNMENTS

RESULT 1

US-09-745-763-38
; Sequence 38, Application US/09745763
; Patent No. US2002065594A1
; GENERAL INFORMATION:
; APPLICANT: Jacobs, Kenneth
; McCoy, John M.
; LaVallie, Edward R.
; Collins-Racie, Lisa A.
; Evans, Cheryl
; Merberg, David
; Treacy, Maurice
; Spaulding, Vikki
; TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 219
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Genetics Institute, Inc.
; STREET: 87 CambridgePark Drive
; CITY: Cambridge
; STATE: MA
; COUNTRY: U.S.A.
; ZIP: 02140
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/745,763
; FILING DATE: 18-Jun-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: Sprunger, Suzanne A.
; REGISTRATION NUMBER: 41,323
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617) 498-8284
; TELEFAX: (617) 876-5851

```

; INFORMATION FOR SEQ ID NO: 38:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 298 amino acids
;   TYPE: amino acid
;   STRANDEDNESS: <Unknown>
;   TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

Query Match          99.8%; Score 1415; DB 9; Length 298;
Best Local Similarity 99.3%; Pred. No. 2.5e-125;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKQQVVTVAVYQEAIIACKTPKKTVKYSLRLEWKKLGRSVSFVYQQTLQGD 60
DB 23 YHKAYGFSAPKQQVVTVAVYQEAIIACKTPKKTVKYSLRLEWKKLGRSVSFVYQQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTVTLVLVAPAVPSCVCP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTVTLVLVAPAVPSCVCP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWKDGIIRLLENPRLGSGSTNSSYTMNTKTGTLPQN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTFWKDGIIRLLENPRLGSGSTNSSYTMNTKTGTLPQN 202
QY 181 TVSKLDTGEYSCAARNVGYRRCPCGRKMOVDLNTSGIIAAVVVALVIVSGLGVCYAQ 240
DB 203 TVSKLDTGEYSCAARNVGYRRCPCGRKMOVDLNTSGIIAAVVVALVIVSGLGVCYAQ 262
QY 241 RKGYSKETSFKSNSSSKATTMSENDFKHTKSFII 276
DB 263 RKGYSKETSFKSNSSSKATTMSENDFKHTKSFII 298

RESULT 2
US-09-799-777-30
; Sequence 30, Application US/09799777
; Patent No. US20020091244A1
; GENERAL INFORMATION:
; APPLICANT: Lal, Preeti
; Hillman, Jennifer L.
; Corley, Neil C.
; Guegler, Karl J.
; Baugh, Mariah
; Sather, Susan
; Shah, Purvi
; TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS
; NUMBER OF SEQUENCES: 154
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3174 PORTER DRIVE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/799,777
; FILING DATE: 06-Mar-2001
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/002,485
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: BILLINGS, LUCY J.
; REGISTRATION NUMBER: 36,749
; REFERENCE/DOCKET NUMBER: PF-0459 US
; TELECOMMUNICATION INFORMATION:

; INFORMATION FOR SEQ ID NO: 39:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 298 amino acids
;   TYPE: amino acid
;   STRANDEDNESS: <Unknown>
;   TOPOLOGY: linear
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 39:
US-09-799-777-30

Query Match          99.8%; Score 1415; DB 9; Length 298;
Best Local Similarity 99.3%; Pred. No. 2.5e-125;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKQQVVTVAVYQEAIIACKTPKKTVKYSLRLEWKKLGRSVSFVYQQTLQGD 60
DB 23 YHKAYGFSAPKQQVVTVAVYQEAIIACKTPKKTVKYSLRLEWKKLGRSVSFVYQQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTVTLVLVAPAVPSCVCP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLEEDTVTLVLVAPAVPSCVCP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWKDGIIRLLENPRLGSGSTNSSYTMNTKTGTLPQN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTFWKDGIIRLLENPRLGSGSTNSSYTMNTKTGTLPQN 202
QY 181 TVSKLDTGEYSCAARNVGYRRCPCGRKMOVDLNTSGIIAAVVVALVIVSGLGVCYAQ 240
DB 203 TVSKLDTGEYSCAARNVGYRRCPCGRKMOVDLNTSGIIAAVVVALVIVSGLGVCYAQ 262
QY 241 RKGYSKETSFKSNSSSKATTMSENDFKHTKSFII 276
DB 263 RKGYSKETSFKSNSSSKATTMSENDFKHTKSFII 298

RESULT 3
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079238A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barrios, Maria Pia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rockey, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; City: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/139,849
; FILING DATE: 07-May-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:

```

TELEPHONE: 312-616-5400
TELEFAX: 312-616-5460
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2

Query Match 99.8%; Score 1415; DB 15; Length 298;
Best Local Similarity 99.3%; Pred. No. 2.5e-125;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 YHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSRLWKKLGRSVSFVYQOQLQGD 60
Db 23 YHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVSSRLWKKLGRSVSFVYQOQLQGD 82
Qy 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 142
Qy 121 SSALSGTVLRLCQDKEGNPAPEYTFWPKDGIRLLENPRLGQSQTNSSTNTKTGTLOFN 180
Db 143 SSALSGTVLRLCQDKEGNPAPEYTFWPKDGIRLLENPRLGQSQTNSSTNTKTGTLOFN 202
Qy 181 TVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGIIAAVVVALVISVCGLGVCYQAQ 262
Qy 241 RKGYFSKETSFKQSNSSSKATTMSNDPKHTKSFII 276
Db 263 RKGYFSKETSFKQSNSSSKATTMSNDPKHTKSFII 298

RESULT 4
US-10-192-791-2
Sequence 2, Application US/10192791
Publication No. US20030130166A1
GENERAL INFORMATION:
APPLICANT: Texas Biotechnology Corporation
TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
FILE REFERENCE: TEX4542P0430
CURRENT APPLICATION NUMBER: US/10/192,791
CURRENT FILING DATE: 2003-12-10
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn version 3.1
SEQ ID NO 2
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
US-10-192-791-2

Query Match 99.8%; Score 1415; DB 16; Length 298;
Best Local Similarity 99.3%; Pred. No. 2.5e-125;
Matches 274; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 YHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSRLWKKLGRSVSFVYQOQLQGD 60
Db 23 YHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVSSRLWKKLGRSVSFVYQOQLQGD 82
Qy 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 142
Qy 121 SSALSGTVLRLCQDKEGNPAPEYTFWPKDGIRLLENPRLGQSQTNSSTNTKTGTLOFN 180
Db 143 SSALSGTVLRLCQDKEGNPAPEYTFWPKDGIRLLENPRLGQSQTNSSTNTKTGTLOFN 202
Qy 181 TVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGIIAAVVVALVISVCGLGVCYQAQ 262

Qy 241 RKGYFSKETSFKQSNSSSKATTMSNDPKHTKSFII 276
Db 263 RKGYFSKETSFKQSNSSSKATTMSNDPKHTKSFII 298

RESULT 5
US-09-853-161-76
Sequence 76, Application US/09853161
Patent No. US20020076756A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 28 Human Secreted Proteins
FILE REFERENCE: P2003P3
CURRENT APPLICATION NUMBER: US/09/853,161
CURRENT FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: 60/265,583
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 09/152,060
PRIOR FILING DATE: 1998-09-11
PRIOR APPLICATION NUMBER: PCT/US98/04858
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/040,762
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/040,710
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/050,934
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,100
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,357
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,189
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/057,765
PRIOR FILING DATE: 1997-09-05
PRIOR APPLICATION NUMBER: 60/048,970
PRIOR FILING DATE: 1997-06-06
PRIOR APPLICATION NUMBER: 60/069,368
PRIOR FILING DATE: 1997-12-19
NUMBER OF SEQ ID NOS: 118
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match 99.7%; Score 1414; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 3.1e-125;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 YHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSRLWKKLGRSVSFVYQOQLQGD 60
Db 23 YHKAYGFSAPKDDQVVTAVYQEAAILACKTPKKTVXSRLWKKLGRSVSFVYQOQLQGD 82
Qy 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQNLEEDTTLVLVAPVAPVPSCEVP 142
Qy 121 SSALSGTVLRLCQDKEGNPAPEYTFWPKDGIRLLENPRLGQSQTNSSTNTKTGTLOFN 180
Db 143 SSALSGTVLRLCQDKEGNPAPEYTFWPKDGIRLLENPRLGQSQTNSSTNTKTGTLOFN 202
Qy 181 TVSKLDTGEYSCARNVGYRRCPCGRMVDLNLISGIIAAVVVALVISVCGLGVCYQAQ 240

Db 203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNISGIIAAVVVVVALVIVSVCGLGVCYQAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSENDFKHTKSFII 276
Db 263 RKGYFSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 6
US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US20020077287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P4
; CURRENT APPLICATION NUMBER: US/09/852,659A
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76

Query Match 99.7%; Score 1414; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 3.1e-125;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVVAVXYQEAAILACKTPKKTVXSRLEWKLGSRVSFVYYQQTLOGD 60
Db 23 YHKAYGFSAPKDDQVVVAVXYQEAAILACKTPKKTVXSRLEWKLGSRVSFVYYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKRCVSAPEQONLEEDVTLEVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKRCVSAPEQONLEEDVTLEVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSTNSSTMTKTGTLOFN 180
Db 143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSTNSSTMTKTGTLOFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNISGIIAAVVVVVALVIVSVCGLGVCYQAQ 240
Db 203 TVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNISGIIAAVVVVVALVIVSVCGLGVCYQAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSENDFKHTKSFII 276
Db 263 RKGYFSKETSFOKSNSSSKATTMSENDFKHTKSFII 298

RESULT 7
US-09-852-797-76
; Sequence 76, Application US/09852797
; Patent No. US20020172994A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.7%; Score 1414; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 3.1e-125;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVVAVXYQEAAILACKTPKKTVXSRLEWKLGSRVSFVYYQQTLOGD 60
Db 23 YHKAYGFSAPKDDQVVVAVXYQEAAILACKTPKKTVXSRLEWKLGSRVSFVYYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKRCVSAPEQONLEEDVTLEVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKRCVSAPEQONLEEDVTLEVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSTNSSTMTKTGTLOFN 180
Db 143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSTNSSTMTKTGTLOFN 202

QY 181 TVSKLDTGYSCEARNVGVYRRCPGKRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYAO 240
Db 203 TVSKLDTGYSCEARNVGVYRRCPGKRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYAO 262
QY 241 RKGYSKETSFOKNSSSKATTMSENDFKHTKSFII 276
Db 263 RKGYSKETSFOKNSSSKATTMSENDFKHTKSFII 298

RESULT 8

US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; CURRENT FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16

RESULT 9

US-09-909-0888-64
; Sequence 64, Application US/099090888
; Patent No. US20020146709A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,0888
; CURRENT FILING DATE: 2001-07-18

; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-909-320-64

Query Match 96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKQQVVTVAVXQBAIIACKTPKKTVAISRLKWKLGSRVSFVYQQTLOGD 60
Db 23 YHKAYGFSAPKQQVVTVAVXQBAIIACKTPKKTVAISRLKWKLGSRVSFVYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQONLEEDVTTLVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQQONLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVVELRCODKEGNPAEYTWFKDGIRLLENPRIGSQSTNSSTYTMNTKTGLQFN 180
Db 143 SSALSGTVVVELRCODKEGNPAEYTWFKDGIRLLENPRIGSQSTNSSTYTMNTKTGLQFN 202
QY 181 TVSKLDTGYSCEARNVGVYRRCPGKRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYAO 240
Db 203 TVSKLDTGYSCEARNVGVYRRCPGKRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYAO 262
QY 241 RKGYSKETSFOKNSSSKATTMSEN 266
Db 263 RKGYSKETSFOKNSSSKATTMSEN 288

; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match 96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHAYGFSAPKQOVVAVYQBAILLACKTPKTVXRLEWKLGSRVSFVYVYQOTLQGD 60
Db |||||||
23 YHAYGFSAPKQOVVAVYQBAILLACKTPKTVXRLEWKLGSRVSFVYVYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPVPSCEVP 120
Db |||||||
83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVVELRCQDEKGNPAPEYTFWKGIRLLENPRLGSTNSSTYMTNKTGTLQFN 180
Db |||||||
143 SSALSGTVVVELRCQDEKGNPAPEYTFWKGIRLLENPRLGSTNSSTYMTNKTGTLQFN 202
QY 181 TVSKLDTGYSCEARNVSGYRCPGKRMQVDLNLISGIIIAAVVVALVIVSVCGLGVCYAQ 240
Db |||||||
203 TVSKLDTGYSCEARNVSGYRCPGKRMQVDLNLISGIIIAAVVVALVIVSVCGLGVCYAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSEN 266
Db |||||||
263 RKGYFSKETSFOKSNSSSKATTMSEN 288

RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi

; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gottard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64

Query Match 96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy	1	YHKAYGFSAPKDDQVVTVAVYQEAII	LAKTPKKTVXSRLEWKKLGRSVSFVYYQQT	LQGD	60		
Db	23	YHKAYGFSAPKDDQVVTVAVYQEAII	LAKTPKKTVXSRLEWKKLGRSVSFVYYQQT	LQGD	82		
Qy	61	FKNRAEMIDFNIRIKNVNTRSDAGK	YRCEVSAPEEQONLEEDTVTLVLVAP	APVPSCEVP	120		
Db	83	FKNRAEMIDFNIRIKNVNTRSDAGK	YRCEVSAPEEQONLEEDTVTLVLVAP	APVPSCEVP	142		
Qy	121	SSALSGTVELRCQDEKGNPAPEYTF	KDGI RLL ENPRLG	SQSTNSSYTMNTKTGT	LQFN	180	
Db	143	SSALSGTVELRCQDEKGNPAPEYTF	KDGI RLL ENPRLG	SQSTNSSYTMNTKTGT	LQFN	202	
Qy	181	TVSKLDTGEYSCAARNVGYRRC	CPKRMQVDNLISGIIIAA	VVVVALVSV	CGCLGV	CYQ	240
Db	203	TVSKLDTGEYSCAARNVGYRRC	CPKRMQVDNLISGIIIAA	VVVVALVSV	CGCLGV	CYQ	262
Qy	241	RKYFYSKETSFOKGNSSSKATTMS	EN	266			
Db	263	RKYFYSKETSFOKGNSSSKATTMS	EN	288			

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RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US/09/254,465
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

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Db	203	TVSKLDTGEYSCARNISVGYRRCPGKRMQVDDLNIISGIIAAVVVVVALVTVSVCGLGYCAAC
QY	241	RKGYFSKETSFOKSNSSSKATTMSN 266
Db	263	RKGYFSKETSFOKSNSSSKATTMSN 288

RESULT 12

US-09-902-853-64

Sequence 64, Application US/09902853

Publication No. US20020192659A1

GENERAL INFORMATION:

APPLICANT: Genentech, Inc.

APPLICANT: Ashkenazi, Avi

APPLICANT: Botstein, David

APPLICANT: Desnoyers, Luc

APPLICANT: Eaton, Dan L.

APPLICANT: Ferrara, Napoleone

APPLICANT: Filvaroff, Ellen

APPLICANT: Fong, Sherman

APPLICANT: Gao, Wei-Qiang

APPLICANT: Gerber, Hanspeter

APPLICANT: Gerritsen, Mary E.

APPLICANT: Goddard, A.

APPLICANT: Godowski, Paul J.

APPLICANT: Grimaldi, Christopher J.

APPLICANT: Gurney, Austin L.

APPLICANT: Hillan, Kenneth, J.

APPLICANT: Kljavin, Ivar J.

APPLICANT: Mather, Jennie P.

APPLICANT: Pan, James

APPLICANT: Paonj, Nicholas F.

APPLICANT: Roy, Margaret Ann

APPLICANT: Stewart, Timothy A.

APPLICANT: Tumas, Daniel

APPLICANT: Williams, P. Mickey

APPLICANT: Wood, William, I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

TITLE OF INVENTION: Acids Encoding the Same

FILE REFERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/902,853

CURRENT FILING DATE: 2001-07-10

PRIOR APPLICATION NUMBER: US/09/665,350

PRIOR FILING DATE: 2000-09-18

PRIOR APPLICATION NUMBER: US 60/143,048

PRIOR FILING DATE: 1999-07-07

PRIOR APPLICATION NUMBER: US 60/145,698

PRIOR FILING DATE: 1999-07-26

PRIOR APPLICATION NUMBER: US 60/146,222

PRIOR FILING DATE: 1999-07-28

PRIOR APPLICATION NUMBER: PCT/US99/20594

PRIOR FILING DATE: 1999-09-08

PRIOR APPLICATION NUMBER: PCT/US99/20944

PRIOR FILING DATE: 1999-09-13

PRIOR APPLICATION NUMBER: PCT/US99/21090

PRIOR FILING DATE: 1999-09-15

PRIOR APPLICATION NUMBER: PCT/US99/21547

PRIOR FILING DATE: 1999-09-15

PRIOR APPLICATION NUMBER: PCT/US99/23089

PRIOR FILING DATE: 1999-10-05

PRIOR APPLICATION NUMBER: PCT/US99/28214

PRIOR FILING DATE: 1999-11-29

PRIOR APPLICATION NUMBER: PCT/US99/28313

PRIOR FILING DATE: 1999-11-30

PRIOR APPLICATION NUMBER: PCT/US99/28564

PRIOR FILING DATE: 1999-12-02

PRIOR APPLICATION NUMBER: PCT/US99/28565

PRIOR FILING DATE: 1999-12-02

PRIOR APPLICATION NUMBER: PCT/US99/30095

PRIOR FILING DATE: 1999-12-16

PRIOR APPLICATION NUMBER: PCT/US99/30911

PRIOR FILING DATE: 1999-12-20

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; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-902-853-64

Query Match          96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKQDQVVTAVYQEAAILACKTPKTKVXSRLEWKLGSRVSFVYVYQQTLOGD 60
DB 23 YHKAYGFSAPKQDQVVTAVYQEAAILACKTPKTKVXSRLEWKLGSRVSFVYVYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSGSTNSSTYMTKTGTLOFN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSGSTNSSTYMTKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGVRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYCAQ 240
DB 203 TVSKLDTGEYSCEARNVGVRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYCAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSEN 266
DB 263 RKGYFSKETSFOKSNSSSKATTMSEN 288
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RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivor J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; PRIOR FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
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; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64
```

```

Query Match          96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKQDQVVTAVYQEAAILACKTPKTKVXSRLEWKLGSRVSFVYVYQQTLOGD 60
DB 23 YHKAYGFSAPKQDQVVTAVYQEAAILACKTPKTKVXSRLEWKLGSRVSFVYVYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSGSTNSSTYMTKTGTLOFN 180
DB 143 SSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGSGSTNSSTYMTKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGVRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYCAQ 240
DB 203 TVSKLDTGEYSCEARNVGVRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYCAQ 262
QY 241 RKGYFSKETSFOKSNSSSKATTMSEN 266
DB 263 RKGYFSKETSFOKSNSSSKATTMSEN 288
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RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
```

APPLICANT: Botstein, David
APPLICANT: Deenoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/907,841
PRIOR FILING DATE: 2001-11-20
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16

Db 203 TVSKLDTGEYSCEARNVGVRCPCRMQVDDNLNSIGIIAAVVVALVISVCGLVGYAQ 262
Qy 241 RKGYSKETSFKSNSSSKATTMSEN 266
Db 263 RKGYSKETSFKSNSSSKATTMSEN 288
RESULT 15
US-09-904-011-64
Sequence 64, Application US/09904011
Publication No. US20030003530A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Deenoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/904,011
CURRENT FILING DATE: 2001-07-11
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16

Query Match 96.1%; Score 1362; DB 10; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 1 YHKAYGFSAPKQOQVVTAIXYQEAIIACKTPKTVXSRLEWKKLGRSVSFVYYQOTLQGD 60
Db 23 YHKAYGFSAPKQOQVVTAIXYQEAIIACKTPKTVXSRLEWKKLGRSVSFVYYQOTLQGD 82
Qy 61 FKNRAEMIDFNIRIKNVTSDAGKRCVSAFSEQONLEEDVTLEVLVAFAVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKRCVSAFSEQONLEEDVTLEVLVAFAVPSCEVP 142
Qy 121 SSALSGTVVLRCDQEGNPAPEYTFWFKDGRILLENPRIGSQSTNSSSYTMNTKTGTLPQN 180
Db 143 SSALSGTVVLRCDQEGNPAPEYTFWFKDGRILLENPRIGSQSTNSSSYTMNTKTGTLPQN 202
Qy 181 TVSKLDTGEYSCEARNVGVRCPCRMQVDDNLNSIGIIAAVVVALVISVCGLVGYAQ 240

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; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      96.1%; Score 1362; DB 11; Length 312;
Best Local Similarity 99.2%; Pred. No. 2.7e-120;
Matches 264; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy      1 YHKAYGFSAPKDDQVVTAVXYQEAAILACKTPKKTVXSRLWKLGSRVSFVYYQOTLQGD 60
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy     23 YHKAYGFSAPKDDQVVTAVXYQEAAILACKTPKKTVXSRLWKLGSRVSFVYYQOTLQGD 82
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy     61 FKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEGGQNLLEDVTTLVLVAPAVPSCEVP 120
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy     83 FKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEGGQNLLEDVTTLVLVAPAVPSCEVP 142
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    121 SSALSGTIVVELRCODKEGNPAPEYTWPKDGIRLLENPRLGQSQTNSSTNTKTGTLQFN 180
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    143 SSALSGTIVVELRCODKEGNPAPEYTWPKDGIRLLENPRLGQSQTNSSTNTKTGTLQFN 202
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    181 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYAO 240
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    203 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLNIGIIAAVVVVALVISVCGLGVCYAO 262
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    241 RKGYSKETSFKSNSSSSKATTMSN 266
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Qy    263 RKGYSKETSFKSNSSSSKATTMSN 288
Db      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Search completed: December 9, 2003, 17:22:01
Job time : 25.4843 secs
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Result No.	Query			DB	ID	Description
	Score	Match	Length			
1	426	30.0	299	2	S56749	junctional adhesio
2	190.5	13.4	365	2	JC3780	coxsackie- and ade
3	186	13.1	811	2	A41054	fasciclin II, tran
4	186	13.1	873	2	B41054	fasciclin II PI-li
5	171	12.1	6642	2	T29757	protein UNC-89 - C
6	163.5	11.5	7962	2	I38346	elastic titin - hu
7	160.5	11.3	1367	2	A41228	protein-tyrosine k
8	157	11.1	344	2	A27681	nonspecific cross-
9	157	11.1	860	2	JC5702	ErB kinase activa
10	157	11.1	868	2	JC5701	ErB kinase activa
11	155.5	11.0	1328	2	T23007	hypothetical prote
12	155.5	11.0	2783	2	T34416	hypothetical prote
13	155	10.9	725	2	JE0100	neural cell adhesi
14	155	10.9	850	2	JC5700	ErB kinase activa
15	153.5	10.8	521	2	JC3508	biliary glycoprote
16	152	10.7	773	2	T46283	hypothetical prote
17	152	10.7	5175	2	T20992	hypothetical prote
18	152	10.7	5198	2	T43290	hemocentin precurs
19	151.5	10.7	1033	2	S19247	cell adhesion prot
20	151	10.6	1092	1	JN0635	neural cell adhesi
21	151	10.6	1501	2	I36148	protein-tyrosine-p
22	151	10.6	1863	2	S46217	protein-tyrosine-p
23	150.5	10.6	521	2	S34338	biliary glycoprote
24	150	10.6	1499	2	I50212	protein-tyrosine-p
25	150	10.6	1907	2	S50893	protein-tyrosine-p
26	148.5	10.5	519	2	A44783	ecto-ATPase precu
27	148	10.4	725	2	JE0099	neural cell adhesi
28	148	10.4	1077	1	IUXLNL	neural cell adhesi
29	148	10.4	1288	2	T30532	neural cell adhesi

```
Db 262 SRGHFDRT---KKGTSSKKVIYQSPARSEGEFKQTSSFLV 299

RESULT 2
JC7780
C:Species: Bos primigenius taurus (cattle)
C:Date: 02-Apr-2002 #sequence_revision 02-Apr-2002 #text_change 02-Apr-2002
C:Accession: JC7780
R:Thoenen, I.; Keyaerts, E.; Lindberg, M.; Van Ranst, M.
Biochem. Biophys. Res. Commun. 288, 805-808, 2001
A:Title: Characterization of a cDNA encoding the bovine coxsackie and adenovirus receptor
A:Reference number: JC7780
A:Contents: Liver
A:Accession: JC7780
A:Molecule type: mRNA
A:Residues: 1-365 <THO>
A:Cross-references: GB:AY033651
C:Comment: This protein serves as the primary adenoviral attachment site on bovine cells

Query Match 13.4%; Score 190.5; DB 2; Length 365;
Best Local Similarity 24.1%; Pred. No. 1e-07;
Matches 73; Conservative 43; Mismatches 122; Indels 65; Gaps 11;

QY 6 GFSAPKQQVVTAVXYQBAAILACK---TPKKTVXSRLEW-----KKL-----GRS 47
Db 19 GLSITTPQMIKAKGETAYLPCKFTLGPDOGLDIEWLSPADNQVDQVILYSGDK 78
QY 48 VSFVYQOTLQDGFKNRAEMI-----DFNIRIKNVTSDAGKYRCEV-SAPSEGGQNL 99
Db 79 IYDDYQ-----DLKGRVHFTSNDLKSGDASINVTNLQSLDGTGYQCKVKAPGVGNKKI 133
QY 100 EEDTFTLEVLVAPVPSCEVPSSALSGLTVELRCQDKEGNPAPEYTFWKDGIIRLENPRL 159
Db 134 Q-----LTVLVPKGIQYVDSBEIGNDFLKEPREGSLPLRYEWOK-----LS 179
QY 160 GSQSTNSGYTNTKGTGLQFNVTSLKDTGEYSCEARNVGYRR-----PKRQMVD 211
Db 180 DSOKLPTSWLPMTSPVSVKNASAEVSGTYTCTVRNRVSGDQLLLRLDVPVPSNRACTI 239
QY 212 DLNLSGLIAAVVVALVISVCLGVCAVQAKRGYSKETSFO-----KSNSSSKATTM 263
Db 240 AGAVIGTLALVLIIVFCCH-----KKRREEKEVHHDIREDVPPPKSRTSTARSYI 295

QY 264 SEN 266
Db 296 GSN 298

RESULT 3
A41054
fasciclin II, transmembrane splice form precursor - fruit fly (Drosophila melanogaster)
C:Species: Drosophila melanogaster
C:Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C:Accession: A41054
R:Grenningloh, G.; Rehm, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A:Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A:Reference number: A41054; MUID:92005695; PMID:1913818
A:Accession: A41054
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-811 <GRE>
A:Cross-references: GB:M77165; NID:g157402; PID:g157403
C:Genetics:
A:Gene: FlyBase:Fas2
A:Cross-references: FlyBase:FBgn0000635
C:Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; imm
C:Keywords: membrane protein

Query Match 13.1%; Score 186; DB 2; Length 811;
Best Local Similarity 24.6%; Pred. No. 6.2e-07;
Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;

QY 8 SAPKDDQVVTAVXYQBAAILACKT---PKKTVXSRLEWKKLG---RSVSFVYVYQOTLQDGF 61
Db 142 NAPENQYPTLG---QDYVVMCEVKADPNPTI---DMLRNGDPIRTTNDKTVVQT----- 189

QY 62 KNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTFTLEVLVAPVPSCEVPS 121
Db 190 -----NGLLRNVQESDEGIYTCR-AAVETGELLER-TIRVEVFIQPEIISLPTNL 239

QY 122 SALSGLTVELRCQDKEGNPAPEYTFWKDGIIRLENPRLGSSQSTNSSTYTMNTKGTGLQFN 181
Db 240 EAVEGKPPAANCTAR-GKVPVEISWIRDATQL-----NVATADRFOVNPQTGLVTISS 291

QY 182 VSKLDTGEYSCEARNVGYRRCPGK-----RMQVDDL-NISGIIAAVVVVALVISVCLG 235
Db 292 VSQDDYGTGTYTCLAKNRAGVVDQTKLNLVLRPQIYELYNVTGARTKEIAI----- 341

QY 236 VCYAQRKGYSKETSFOKSNSSSKATTMSND 267
Db 342 TCRA--KGRPAPAITFRWGTQBEYTNQGQDD 371

RESULT 4
B41054
fasciclin II PI-linked splice form precursor - fruit fly (Drosophila melanogaster)
C:Species: Drosophila melanogaster
C:Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C:Accession: B41054
R:Grenningloh, G.; Rehm, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A:Title: Genetic analysis of growth cone guidance in Drosophila: fasciclin II functions
A:Reference number: A41054; MUID:92005695; PMID:1913818
A:Accession: B41054
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-873 <GRE>
A:Cross-references: GB:M77166
C:Genetics:
A:Gene: FlyBase:Fas2
A:Cross-references: FlyBase:FBgn0000635
C:Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; imm
C:Keywords: transmembrane protein

Query Match 13.1%; Score 186; DB 2; Length 873;
Best Local Similarity 24.6%; Pred. No. 6.7e-07;
Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;

QY 8 SAPKDDQVVTAVXYQBAAILACKT---PKKTVXSRLEWKKLG---RSVSFVYVYQOTLQDGF 61
Db 142 NAPENQYPTLG---QDYVVMCEVKADPNPTI---DMLRNGDPIRTTNDKTVVQT----- 189

QY 62 KNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTFTLEVLVAPVPSCEVPS 121
Db 190 -----NGLLRNVQESDEGIYTCR-AAVETGELLER-TIRVEVFIQPEIISLPTNL 239

QY 122 SALSGLTVELRCQDKEGNPAPEYTFWKDGIIRLENPRLGSSQSTNSSTYTMNTKGTGLQFN 181
Db 240 EAVEGKPPAANCTAR-GKVPVEISWIRDATQL-----NVATADRFOVNPQTGLVTISS 291

QY 182 VSKLDTGEYSCEARNVGYRRCPGK-----RMQVDDL-NISGIIAAVVVVALVISVCLG 235
Db 292 VSQDDYGTGTYTCLAKNRAGVVDQTKLNLVLRPQIYELYNVTGARTKEIAI----- 341

QY 236 VCYAQRKGYSKETSFOKSNSSSKATTMSND 267
Db 342 TCRA--KGRPAPAITFRWGTQBEYTNQGQDD 371

RESULT 5
T29757
protein UNC-89 - Caenorhabditis elegans
C:Species: Caenorhabditis elegans
C:Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 03-Dec-1999
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C;Accession: T29757
R;Du, Z.; Le, T.T.; Wilson, R.
submitted to the EMBL Data Library, May 1997
A;Description: The sequence of C. elegans cosmid C09D1.
A;Reference number: Z20679
A;Accession: T29757
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-6642 <DUZ>
A;Cross-references: EMBL:AF003131; PIDN:ABAS4132.1; GSPDB:GN00019; CESP:unc-89
A;Experimental source: strain Bristol N2; clone C09D1
C;Genetics:
A;Gene: CESP:unc-89
A;Map position: 1
A;Introns: 17/2; 108/3; 154/2; 211/2; 265/3; 326/2; 352/3; 426/2; 454/1; 500/1; 537/1; 609/1; 5917/1; 6027/1; 6061/3; 6153/2; 6515/1; 6552/3; 6609/1

Query Match 12.1%; Score 171; DB 2; Length 6642;
Best Local Similarity 28.1%; Pred. No. 0.00012;
Matches 61; Conservative 29; Mismatches 75; Indels 52; Gaps 11;

QY 6 GFSAPKQQVV---TAVXQEAILACKTPKTKVKSRLKWKLGSRVSFVYQTLQGDFFK 62
DB 3823 GRGAPEVELRSCVTTEKQQAALKCKV-KQEPKPKIKTKBGEVEM-----SAR 3872
QY 63 NRAEMID---FNIRIKNVTSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPVPSCV 119
DB 3873 VRAEKDDGTLTLTFDNTVQADAGEYRCE--AENEYGSANTEGPIIIVTLCAPKIDG-EA 3929
QY 120 P-----SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRLGQSQT 164
DB 3930 PDFLPQVPKPAVVTVGETAVLEGKI-----SGKPKPSVKYKNGBELKPSDRVKIE-- 3979
QY 165 NSSYTWNTKGTGLQFN-TVSKL-DTGRYSCEARNSVG 199
DB 3980 -----NLDDGTORLTVNAKLDDMBEYRCASNEFG 4010

RESULT 6
I38346
elastic titin - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jul-2000
C;Accession: I38346
R;Labeit, S.; Kolmerer, B.
Science 270, 293-296, 1995
A;Title: Titins: giant proteins in charge of muscle ultrastructure and elasticity.
A;Reference number: A57430; MUID:96026330; PMID:7569978
A;Accession: I38346
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-7962 <RES>
A;Cross-references: EMBL:X90569; NID:g1017426; PIDN:CAA62189.1; PID:g1017427
A;Gene: GDB:TTN
A;Cross-references: GDB:127867; OMIM:188840
A;Map position: 2q31-2q31

Query Match 11.5%; Score 163.5; DB 2; Length 7962;
Best Local Similarity 28.3%; Pred. No. 0.00058;
Matches 53; Conservative 30; Mismatches 65; Indels 39; Gaps 7;

QY 23 EAILACKTPKTKVKSRLKWKLGSRV-----SFVYQTLQGDFFKRAEMIDFNIRIKN 76
DB 2666 KSIILESTVTGLTPISTVTKKDGFNITTEKCNIVTTEKC-----ILEILN 2712
QY 77 VTRSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPVPSCV-----PSSALSGTVVELR 132
DB 2713 STKRDAQGYSCRIE--NEAGRDV-----CGALVSTLEPPYFVTELEAAVGDVSLSQ 2764
QY 133 CODKEGNPAPEYTWFKDGIIRLLENPRLGQSQTSSNTMTKGTGLQFNVTYKLDGTGEYSC 192
DB 2765 CQ-VAGTPEITVSWYKGTDLKRLPTPEYRTFTNN-----VATLVFNKNVINDSGEYTC 2816

QY 193 EARNSVG 199
DB 2817 KAENSIG 2823

RESULT 7

A41228
Protein-tyrosine kinase (EC 2.7.1.112) Flk-1 precursor, endothelial cell-specific receptor
C;Species: Mus musculus (house mouse)
C;Date: 19-Jun-1992 #sequence_revision 19-Jun-1992 #text_change 04-Feb-2000
C;Accession: A41228; A46065; I58365; S18832; S29991
R;Matthews, W.; Jordan, C.T.; Gavin, M.; Jenkins, N.A.; Copeland, N.G.; Lemischka, I.R.
Proc. Natl. Acad. Sci. U.S.A. 88, 9026-9030, 1991
A;Title: A receptor tyrosine kinase cDNA isolated from a population of enriched primitive
A;Reference number: A41228; MUID:92020984; PMID:1717995
A;Accession: A41228
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-1367 <MAT>
A;Cross-references: GB:X59397; NID:G50976; PIDN:CAA42040.1; PID:G50977
R;Millaud, B.; Witzigmann-Voos, S.; Schunrich, H.; Martinez, R.; Moller, N.P.; Risau, W.
Cell 72, 835-846, 1993
A;Title: High affinity VEGF binding and developmental expression suggest Flk-1 as a major
A;Reference number: A46065; MUID:93208880; PMID:7681362
A;Accession: A46065
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-24,'T',26-782,'VL',785-916,'C',918-1367 <MIL>
A;Cross-references: GB:X70842; NID:G57923; PIDN:CAA50192.1; PID:G57924
A;Note: submitted to the EMBL Data Library, January 1993
A;Note: sequence extracted from NCBI backbone (NCBI:P128064)
R;Oelrichs, R.B.; Reid, H.H.; Bernard, O.; Ziemlecki, A.; Wilks, A.F.
Oncogene 8, 11-18, 1993
A;Title: NYK/FLK-1: a putative receptor protein tyrosine kinase isolated from E10 embryo
A;Reference number: I58365; MUID:93141255; PMID:842398
A;Accession: I58365
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Residues: 1-678,'D',680-1340,'RSPV' <OEL>
A;Cross-references: GB:S53103; NID:G264004; PIDN:AAB25043.1; PID:G264005
C;Genetics:
A;Gene: FLK-1; NYK
C;Superfamily: unassigned Ser/Thr or Tyr-specific protein kinases; protein kinase homolog
C;Keywords: ATP; autophosphorylation; phosphoprotein; phosphotransferase; transmembrane
F;830-1165/Domain: protein kinase homology <KIN>
F;838-846/Region: protein kinase ATP-binding motif

Query Match 11.3%; Score 160.5; DB 2; Length 1367;
Best Local Similarity 24.8%; Pred. No. 0.00012;
Matches 53; Conservative 23; Mismatches 75; Indels 63; Gaps 6;

QY 22 QEAILACKTPKTKVKSRLKWKLGSRVSFVYQTLQGDFFKRAEMIDFN----- 71
DB 562 QESVSLCTADRNTFENLTWYKLGSAQTSVHMGESLTPVCKNLDALWKLNGTWFNSSTND 621
QY 72 ---IRIKNVTSDAGKYRC-----EVSAPSEQONLEEDTVTLV 108
DB 622 ILIVAFQNASLQDQGDYVCSAQDKTKKRHLVKQLIILERMAMITG-NLENQTTI-- 678
QY 109 LVAPVPSCVPSVSSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRLGQSQTSSSY 168
DB 679 -----GETIEVTC-PASGNPTPHITWFKDNTLVEDSGIVLRDGNRL 720
QY 169 TMTKGTGLQFNVTYKLDGTGEYSCARNSVGYYR 202
DB 721 TI-----RRVRKEDGGLYTCQACNVLGAR 745

RESULT 8
A27681
non-specific cross-reacting antigen precursor - human
N;Alternate names: NCA; TEX/NCA

C;Species: Homo sapiens (man)
 C;Date: 31-Mar-1989 #sequence revision 16-Sep-1992 #text change 11-Jan-2000
 A;Accession: A26902; A29875; A27681; B31037; A2918; A27709; A36271; C26414; E44476; F44476; G; Oikawa, S.; Kosaaki, G.; Nakazato, H.
 Biochem. Biophys. Res. Commun. 146, 464-469, 1987
 A;Title: Molecular cloning of a gene for a member of carcinoembryonic antigen (CEA) gene
 A;Reference number: A26902; MUID: 87298464; PMID: 36119891
 A;Accession: A26902
 A;Molecule type: DNA
 A;Residues: 1-141 <OIK>
 A;Cross-references: GB:M17082; NID: g180230; PIDN: AAA51971.1; PID: g553222
 R;Thompson, J.A.; Pande, H.; Paxton, R.J.; Shively, L.; Padma, A.; Simmer, R.L.; Todd, C.
 Proc. Natl. Acad. Sci. U.S.A. 84, 2965-2969, 1987
 A;Title: Molecular cloning of a gene belonging to the carcinoembryonic antigen gene family
 A;Reference number: A29875; MUID: 87204248; PMID: 3033672
 A;Accession: A29875
 A;Molecule type: DNA
 A;Residues: 23-141 <THO>
 A;Cross-references: GB:M16337
 A;Note: the authors translated the codon ACT for residue 64 as Tyr
 R;Tawaragi, Y.; Oikawa, S.; Matsumoto, Y.; Kosaaki, G.; Nakazato, H.
 Biochem. Biophys. Res. Commun. 150, 89-96, 1988
 A;Title: Primary structure of nonspecific crossreacting antigen (NCA), a member of carcinoembryonic antigen family
 A;Reference number: A27681; MUID: 88106638; PMID: 3337731
 A;Accession: A27681
 A;Molecule type: mRNA
 A;Residues: 1-238, 'V', 240-344 <TAW>
 A;Cross-references: GB:M18728; NID: g189084; PIDN: AAA59907.1; PID: g189085
 R;Barnett, T.; Goebel, S.J.; Nothdurft, M.A.; Elting, J.J.
 Genomics 3, 59-66, 1988
 A;Title: Carcinoembryonic antigen family: characterization of cDNAs coding for NCA and CEA
 A;Reference number: A31037; MUID: 89122014; PMID: 3220478
 A;Accession: B31037
 A;Molecule type: mRNA
 A;Residues: 1-137, 'L', 139-344 <BAR>
 A;Cross-references: GB:M29541; NID: g189103; PIDN: AAA59915.1; PID: g189104
 A;Note: the authors translated the codon TTG for residue 138 as Phe
 R;Neumaier, M.; Zimmermann, W.; Shively, L.; Hinoda, Y.; Riggs, A.D.; Shively, J.E.
 J. Biol. Chem. 263, 3202-3207, 1988
 A;Title: Characterization of a cDNA clone for the nonspecific cross-reacting antigen (NCA)
 A;Reference number: A29918; MUID: 88139389; PMID: 2830274
 A;Accession: A29918
 A;Molecule type: mRNA
 A;Residues: 1-344 <NEU>
 A;Cross-references: GB:M18216; GB: J03550; NID: g178690; PIDN: AAA51739.1; PID: g178691
 R;Grunert, F.; Kolbinger, F.; Schwarz, K.; Schwaibold, H.; von Kleist, S.
 Biochem. Biophys. Res. Commun. 153, 1105-1115, 1988
 A;Title: Protein analysis of NCA-50 shows identity to NCA cDNA deduced sequences and indicates that NCA is a protein
 A;Reference number: A27709; MUID: 88268882; PMID: 3390172
 A;Accession: A27709
 A;Molecule type: protein
 A;Residues: 35-95; 99-120; 123-138; 149-151, 'X', 153-162; 166, 'X', 174-193; 231-239
 R;Hefta, S.A.; Paxton, R.J.; Shively, J.E.
 J. Biol. Chem. 265, 8618-8626, 1990
 A;Title: Sequence and glycosylation site identity of two distinct glycoforms of nonspecific cross-reacting antigen (NCA)
 A;Reference number: A36271; MUID: 90256782; PMID: 2341397
 A;Accession: A36271
 A;Molecule type: protein
 A;Residues: 35-42; 44-53; 55-80; 83-134; 139-160; 166-172; 174-180; 191-194; 204-224; 233-308; 310-312
 R;Paxton, R.J.; Mooser, G.; Pande, H.; Lee, T.D.; Shively, J.E.
 Proc. Natl. Acad. Sci. U.S.A. 84, 920-924, 1987
 A;Title: Sequence analysis of carcinoembryonic antigen: identification of glycosylation sites
 A;Reference number: A26414; MUID: 87147209; PMID: 3469650
 A;Accession: C26414
 A;Molecule type: protein
 A;Residues: 35-69 <PAX>
 R;Khan, W.N.; Frangemyr, L.; Teglund, S.; Israelsson, A.; Bremer, K.; Hammarstrom, S.
 Genomics 14, 384-390, 1992
 A;Title: Identification of three new genes and estimation of the size of the carcinoembryonic antigen gene family
 A;Reference number: A44476; MUID: 93052339; PMID: 1427854
 A;Accession: B44476
 A;Status: preliminary; not compared with conceptual translation
 A;Molecule type: DNA

A;Residues: 35-141 <KHA>
 A;Accession: F44476
 A;Status: preliminary; not compared with conceptual translation
 A;Molecule type: DNA
 A;Residues: 35-137, 'L', 139-141 <KH2>
 C;Comment: This protein appears to be processed at the carboxyl terminus and anchored to the membrane
 C;Genetics:
 A;Gene: GDB:NCA
 A;Cross-references: GDB:120221; OMIM:163980
 A;Map position: 19q13.2-19q13.2
 A;Introns: 22/1
 A;Note: the list of introns may be incomplete
 C;Superfamily: carcinoembryonic antigen; carcinoembryonic antigen precursor amino-terminal
 C;Keywords: blocked carboxyl end; glycoprotein; lipoprotein; membrane protein; phosphatidylcholine transferase
 F;1-138/Domain: carcinoembryonic antigen precursor amino-terminal homology <CEAN>
 F;1-34/Domain: signal sequence #status predicted <SIG>
 F;35-320/Product: nonspecific cross-reacting antigen #status experimental <MAT>
 F;160-217/Domain: immunoglobulin homology <IMM2>
 F;321-344/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F;104,111,115,152,173,197,224,256,274,286,292/Binding site: carbohydrate (Aen) (covalent)
 F;309/Binding site: carbohydrate (Aen) (covalent) #status predicted
 F;320/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Gly) (in mature form)
 Query Match 11.1%; Score 157; DB 2; Length 344;
 Best Local Similarity 28.4%; Pred No. 4.6e-05;
 Matches 48; Conservative 25; Mismatches 62; Indels 34; Gaps 8;
 QY 69 DFNIRKNVTRSDAGKYRCEVSAPSEQQNLDEDTVLELVAPVAPVCEVPSSA--LSG 126
 Db NMTLLSVKRDASVECEIQNPASNR--DPVTNLVLYGPDGPIS-PSKANYRPG 252
 QY 127 TVVELRCQKGNPAPRYTFKQIRLLENPRGQSQTSNSYTWNTKGTLOFTVSKLD 186
 Db ENLNLSC--AASNPAPQYSWFING-----TFQSTQELFIPNITVNN 293
 QY 187 TGEYSCCARNSVGRRCFG-KRMQVDDNLISG---IIAAVVVVALVLSV 231
 Db SGVYMCQAHNS-----ATGLNRTVTMTVSGSAPVLSAVATVGITGV 337
 RESULT 9
 JC5702
 ErbB kinase activator alpha2a, brain and thymus - rat
 C;Species: Rattus norvegicus (Norway rat)
 C;Date: 25-Nov-1997 #sequence revision 25-Nov-1997 #text change 08-Sep-2002
 C;Accession: JC5702; PC4417
 R;Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miya, J.
 Biochem. J. 222, 675-680, 1997
 A;Title: A novel brain-derived member of the epidermal growth factor family that interacts with ErbB kinase
 A;Reference number: JC5700; MUID: 98006324; PMID: 9348101
 A;Accession: JC5702
 A;Status: nucleic acid sequence not shown
 A;Molecule type: mRNA
 A;Residues: 1-860 <HIG>
 A;Experimental source: PC-12 cell
 A;Accession: PC4417
 A;Status: nucleic acid sequence not shown
 A;Molecule type: mRNA
 A;Residues: 'F', 212-213, 223-860 <HI2>
 A;Cross-references: DDBJ: A8001576; NID: g2605478; PIDN: BAA23348.1; PID: g2605479
 A;Experimental source: PC-12 cell
 C;Comment: This protein is a member of the epidermal growth factor family. It is functional in the differentiation of MDA-MB-453 cells.
 C;Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immunoglobulin-like domain
 C;Keywords: glycoprotein
 F;274-327/Domain: IG-like #status predicted <IGL>
 F;361-397/Domain: EGF homology <EGF>
 F;422-444/Domain: hydrophobic #status predicted <HYD>
 F;163,294,467/Binding site: carbohydrate (Aen) (covalent) #status predicted
 Query Match 11.1%; Score 157; DB 2; Length 860;

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Best Local Similarity 27.7%; Pred. No. 0.00014;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 44 LGRSVFVYQOTLQGD--FKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQQNLEE 101
Db 204 LERNQRYIFFLEPTEOPLVFKTAFAPVDPN--GKNI-KKEVGKILCTDCATRPKLKMKMS 260

QY 102 DTVTILEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGS 161
Db 261 QTGEV-----GEKQSLKCEAAGNPOPSYRWPFGKGKELNR-----S 296

QY 162 QSTNSSYTMTKTGLQFNVTSLKDTGEYSCERNVGVYRCPGKRMQVDDLNI-----S 216
Db 297 RDIRIKYGNRKNRSLQFNKVKVEDAGEYVCEAEINILGKDTVRG-RLHVNVSVTLLSSWS 355

QY 217 GIIAAVVVVALVISVCGLGVCY 238
Db 356 GHARKCNETAKSYCVNG-GVCY 376

RESULT 10
JC5701
Erbb kinase activator alpha, brain and thymus - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 25-Nov-1997 #sequence_revision 25-Nov-1997 #text_change 08-Sep-2002
C:Accession: JC5701; PC4411
R:Higashiyama, S.; Horikawa, M.; Yamada, K.; Ichino, N.; Nakano, N.; Nakagawa, T.; Miyaguchi, J. Biochem. 122, 675-680, 1997
A:Title: A novel brain-derived member of the epidermal growth factor family that interacts with ErbB-2
A:Reference number: JC5700; MUID:98006324; PMID:9348101
A:Accession: JC5701
A:Molecule type: mRNA
A:Residues: 1-868 <H12>
A:Cross-references: DDBJ:D89995; NID:g2605629; PIDN:BA23344.1; PID:g2605630
A:Accession: PC4411
A:Molecule type: protein
A:Residues: 128-162 <H12>
A:Experimental source: PC-12 cell
A:Comment: This protein is a member of the epidermal growth factor family. It is functioning in the differentiation of MDA-MB-453 cells.
C:Superfamily: human ErbB kinase activator alpha, brain and thymus; EGF homology; immunoglobulin-like domain
F:361-397/Domain: EGF homology <EGF>

Query Match 11.1%; Score 157; DB 2; Length 868;
Best Local Similarity 27.7%; Pred. No. 0.00014;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 44 LGRSVFVYQOTLQGD--FKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQQNLEE 101
Db 204 LERNQRYIFFLEPTEOPLVFKTAFAPVDPN--GKNI-KKEVGKILCTDCATRPKLKMKMS 260

QY 102 DTVTILEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLENPRLGS 161
Db 261 QTGEV-----GEKQSLKCEAAGNPOPSYRWPFGKGKELNR-----S 296

QY 162 QSTNSSYTMTKTGLQFNVTSLKDTGEYSCERNVGVYRCPGKRMQVDDLNI-----S 216
Db 297 RDIRIKYGNRKNRSLQFNKVKVEDAGEYVCEAEINILGKDTVRG-RLHVNVSVTLLSSWS 355

QY 217 GIIAAVVVVALVISVCGLGVCY 238
Db 356 GHARKCNETAKSYCVNG-GVCY 376

RESULT 11
T23007
hypochemical protein K09C8.5 - Caenorhabditis elegans
C:Species: Caenorhabditis elegans
C:Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Feb-2000
C:Accession: T23007; T23543
R:Kershaw, J.
submitted to the EMBL Data Library, November 1995
A:Reference number: Z19651
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A:Accession: T23007
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-1328 <W12>
A:Cross-references: EMBL:Z68005; PIDN:CAA91994.1; GSPDB:GN00028; CESP:K09C8.5
A:Experimental source: clone F59F3
R:Kershaw, J.
submitted to the EMBL Data Library, November 1995
A:Reference number: Z19755
A:Accession: T23543
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-1328 <W12>
A:Cross-references: EMBL:Z68006; PIDN:CAA91999.1; GSPDB:GN00028; CESP:K09C8.5
A:Experimental source: clone K09C8
C:Genetics:
A:Gene: CESP:K09C8.5
A:Map position: X
A:Introns: 34/1; 85/3; 133/3; 182/2; 220/3; 262/2; 390/3; 442/2; 493/3; 563/3; 586/3; 611/3; 662/2; 713/3; 764/2; 815/3; 866/3; 917/3; 968/3; 1019/3; 1070/3; 1121/3; 1172/3; 1223/3; 1274/3; 1325/3; 1376/3; 1427/3; 1478/3; 1529/3; 1580/3; 1631/3; 1682/3; 1733/3; 1784/3; 1835/3; 1886/3; 1937/3; 1988/3; 2039/3; 2090/3; 2141/3; 2192/3; 2243/3; 2294/3; 2345/3; 2396/3; 2447/3; 2498/3; 2549/3; 2600/3; 2651/3; 2702/3; 2753/3; 2804/3; 2855/3; 2906/3; 2957/3; 3008/3; 3059/3; 3110/3; 3161/3; 3212/3; 3263/3; 3314/3; 3365/3; 3416/3; 3467/3; 3518/3; 3569/3; 3620/3; 3671/3; 3722/3; 3773/3; 3824/3; 3875/3; 3926/3; 3977/3; 4028/3; 4079/3; 4130/3; 4181/3; 4232/3; 4283/3; 4334/3; 4385/3; 4436/3; 4487/3; 4538/3; 4589/3; 4640/3; 4691/3; 4742/3; 4793/3; 4844/3; 4895/3; 4946/3; 4997/3; 5048/3; 5099/3; 5150/3; 5201/3; 5252/3; 5303/3; 5354/3; 5405/3; 5456/3; 5507/3; 5558/3; 5609/3; 5660/3; 5711/3; 5762/3; 5813/3; 5864/3; 5915/3; 5966/3; 6017/3; 6068/3; 6119/3; 6170/3; 6221/3; 6272/3; 6323/3; 6374/3; 6425/3; 6476/3; 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[illegible]

Wed Dec 10 11:56:42 2003

QY	157	PRLGSO-----STNSS-----YTMNTKITG-----	175
Db	279	PHASSOELFIPNITTNNSGTYTCFVANSVTGLSRTTVKNTVLEPVTPQLQVNTTVKE	338
QY	176	-----TLQFNTVSKLDTGEYSCEARN	196
Db	339	LDSVTLTCLSLNDIGANIQWLFNSQSLQLTERMTLSQNNNSILRIDPIKREDAGEYQCEISN	398
QY	197	SVCYRRCPGKRMQV-----DDLNIISGIIAAVVVVALVISVCGLGVCYAQRKGYSK	247
Db	399	PVSRRRSNSIKLDIIFDPTQGGLSGDAIAGIV--IGVVAGVALIAGLAYFLYSRK---SG	453
QY	248	ETSFQKSNSSSKATTMSN	266
Db	454	GGSDQRDLTEHKPSTSNHN	472

Search completed: December 9, 2003, 17:13:42
Job time : 14.9443 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:08:11 ; Search time 9.13589 Seconds
(without alignments)
1420.702 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418
Sequence: 1 YHKAYGFSAPKQQQVVAVX.....SSKATTMSDNFKHTKSFII 276

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 127863 seqs, 47026705 residues

Total number of hits satisfying chosen parameters: 127863

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1415	99.8	298	1	JAM2_HUMAN
2	426	30.0	299	1	JAM1_HUMAN
3	414.5	29.2	298	1	JAM1_BOVIN
4	410	28.9	300	1	JAM1_MOUSE
5	231	16.3	319	1	A33_HUMAN
6	190.5	13.4	365	1	CXAR_HUMAN
7	186	13.1	873	1	FAS2_DROME
8	180	12.7	365	1	CXAR_MOUSE
9	171	12.1	632	1	UN89_CABEL
10	164	11.6	344	1	CEA6_HUMAN
11	160.5	11.3	1367	1	VGR2_MOUSE
12	159.5	11.2	837	1	NCM2_MOUSE
13	157	11.1	868	1	NRG2_RAT
14	156	11.0	756	1	NRG2_MOUSE
15	155.5	11.0	837	1	NCM2_HUMAN
16	155	10.9	850	1	NRG2_HUMAN
17	153.5	10.8	521	1	CEA1_MOUSE
18	153.5	10.8	1343	1	VGR2_RAT
19	151	10.6	1092	1	NCA2_XENLA
20	148.5	10.5	519	1	ECTO_RAT
21	148	10.4	1088	1	NCAL_XENLA
22	147.5	10.4	1091	1	NCAL_CHICK
23	147	10.4	526	1	CEA1_HUMAN
24	147	10.4	1897	1	PTPF_HUMAN
25	146.5	10.3	761	1	NCAL_HUMAN
26	146.5	10.3	848	1	NCAL_HUMAN
27	146	10.3	1051	1	PTK1_CHICK
28	145	10.2	333	1	AMAL_DROME
29	144.5	10.2	349	1	CEA8_HUMAN
30	144	10.2	1302	1	NRG1_DROME
31	143	10.1	858	1	NCAL_RAT
32	142.5	10.0	265	1	CEA7_HUMAN
33	140.5	9.9	344	1	NTRI_RAT

34	140.5	9.9	847	1	CD22_HUMAN
35	140	9.9	359	1	LACH_DROME
36	140	9.9	853	1	NCAL_BOVIN
37	140	9.9	1906	1	KMLS_CHICK
38	140	9.9	4391	1	PGBM_HUMAN
39	139	9.8	725	1	NCA2_MOUSE
40	139	9.8	1115	1	NCAL_MOUSE
41	139	9.8	3707	1	PGBM_MOUSE
42	138.5	9.8	702	1	CEA5_HUMAN
43	138.5	9.8	1709	1	SN_HUMAN
44	138	9.7	764	1	ICCR_DROME
45	137.5	9.7	344	1	NTRI_MOUSE

ALIGNMENTS

RESULT 1
JAM2_HUMAN
ID _JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
GN JAM2 OR VEJAM OR C21ORF43.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
[1]
RN NCBI_TaxID=9606;
RP SEQUENCE FROM N.A.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;
RT "Vascular endothelial junction-associated molecule, a novel member of
RT the immunoglobulin superfamily, is localized to intercellular
RT boundaries of endothelial cells.";
RL J. Biol. Chem. 275:19139-19145(2000).
[2]
RN NCBI_TaxID=9606;
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976;
RA Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjercke R.J.,
RA Vanderslice P., Morris A.P., Brock T.A.;
RT "A novel protein with homology to the junctional adhesion molecule:
RT Characterization of leukocyte interactions.";
RL J. Biol. Chem. 275:34750-34756(2000).
[3]
RN NCBI_TaxID=9606;
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diachenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McSwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Villalon D.K., Muny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahy J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko V., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S., Krzywinski M.I., Skalek U., Smailus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).

DR EMBL; AF207907; AAF22829.1; -
DR EMBL; AF172398; AAD48877.1; -
DR EMBL; AL136649; CAB66584.1; -
DR PIR; A59406; S56749
DR Genew; HGNC:14685; F11P.
DR MIM; 605721; -
DR GO; 0006954; P:inflammatory response; TAS.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_V.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS00835; IG-LIKE; 2.
KW Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
KW Repeat; Signal.
FT SIGNAL 1 25 POTENTIAL.
FT CHAIN 26 299 JUNCTIONAL ADHESION MOLECULE 1.
FT DOMAIN 26 238 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 239 259 POTENTIAL.
FT DOMAIN 260 299 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 27 125 IG-LIKE V-TYPE 1.
FT DOMAIN 135 228 IG-LIKE V-TYPE 2.
FT DISULFID 50 109 POTENTIAL.
FT DISULFID 153 212 POTENTIAL.
FT CARBOHYD 185 185 N-LINKED (GLCNAC...) (POTENTIAL).
SQ SEQUENCE 299 AA; 32583 MW; D95DE2FEA23D2851 CRC64;

Query Match 30.0%; Score 426; DB 1; Length 299;
Best Local Similarity 35.6%; Pred. No. 4.7e-29;
Matches 100; Conservative 42; Mismatches 99; Indels 40; Gaps 7;

QY 4 AY-GFSAPKQQVVTAVXQEAAILACKTPKTVKSRLEWK-KLGRSVSFVYQQTLOGDF 61
DB |||||
51 AYSGFSSP-----RVEMKFDQDITRLVCYNNKITASY 83

QY 62 KRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVAPSPCEVPS 121
DB |||||
84 EDVTFPTGTFHVRKDTGTYTCMWS--DEGNTYGEVTVQLVLPVPPSKPTINVPSSVT 143

QY 122 SALSGTGWELRCQDKEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTVNTKTGLQFNT 191
DB |||||
142 SATIGNRAVLTCSEQDGPSEYTFKDGIVMTNPKSTRAPNSSTVLPPTTGLVFPDP 201

QY 182 VKLDTGEYSCEARNVGVYRRCPEK-RMQVDLLNIGIIAAVVAALVSVCGLGVCYQAQ 240
DB |||||
202 LGSADTGEYSCEARNVGYTPMTSNVMEAVRNVGVIAAVLVTLILGLVFGIWFAY 261

QY 241 RKGYF--SKETSFOKSNSSSKA-----TTMSEDFKHTSFII 276
DB |||||
262 SRGHFDRT---KKGTSKKVIVSQPSARSEGEFKQTSSFLV 299

RESULT 3
JAM1_BOVIN STANDARD; PRT; 298 AA.
AC Q9XT56;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 1 precursor (JAM).
GN F11R OR JAM1.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99323940; PubMed=10395639;
RA Ozaki H., Ishii K., Horiuchi H., Arai H., Kawamoto T., Okawa K.,
RA Iwamatsu A., Kita T.;
RT "Combined treatment of TNF-alpha and IFN-gamma causes redistribution
of junctional adhesion molecule in human endothelial cells.";

J. Immunol. 163:553-557(1999).
- FUNCTION: Seems to plays a role in epithelial tight junction formation. Appears early in primordial forms of cell junctions and recruits PAR3. The association of the PARD6-PARD3 complex may prevent the interaction of PAR3 with JAM1, thereby preventing tight junction assembly (By similarity). Plays a role in regulating monocyte transmigration involved in integrity of epithelial barrier. Involved in platelet activation.
- SUBUNIT: Interacts with the first PDZ domain of PARD3. The association between PARD3 and PARD6B probably disrupts this interaction (By similarity).
- TISSUE SPECIFICITY: Localized at tight junctions of both epithelial and endothelial cells.
- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
- SIMILARITY: Contains 2 immunoglobulin-like V-type domains.

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EMBL; AF111714; AAD42051.1; -
InterPro; IPR007110; Ig-like.
InterPro; IPR003598; Ig_C2.
InterPro; IPR003006; Ig_MHC.
Pfam; PF00047; Ig; 2.
SMART; SM00408; IGC2; 1.
PROSITE; PS00835; IG-LIKE; 2.
Tight junction; Immunoglobulin domain; Glycoprotein; Transmembrane;
Repeat; Signal.
KW SIGNAL 1 24 POTENTIAL.
FT CHAIN 25 298 JUNCTIONAL ADHESION MOLECULE 1.
FT DOMAIN 25 237 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 238 258 POTENTIAL.
FT DOMAIN 259 298 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 28 124 IG-LIKE V-TYPE 1.
FT DOMAIN 134 227 IG-LIKE V-TYPE 2.
FT DISULFID 49 108 POTENTIAL.
FT DISULFID 152 211 POTENTIAL.
FT CARBOHYD 184 184 N-LINKED (GLCNAC...) (POTENTIAL).
SQ SEQUENCE 298 AA; 32456 MW; 714FE1C1714769A2 CRC64;

Query Match 29.2%; Score 414.5; DB 1; Length 298;
Best Local Similarity 35.3%; Pred. No. 4.5e-28;
Matches 98; Conservative 41; Mismatches 100; Indels 39; Gaps 7;

QY 6 GFSAPKQQVVTAVXQEAAILACKTPKTVKSRLEWK-KLGRSVSFVYQQTLOGDFKNR 64
DB |||||
53 GFSSP-----RVEMKFTGDIRGLVCYNNKITASYENR 85

QY 65 AEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLVAPVAPSPCEVPSAL 124
DB |||||
86 VTFSTGTGTFHVRKDTGTYTCMWS--DEGNTYGEVTVQLVLPVPPSKPTINVPSSVT 143

QY 125 SCTVVELRCQDKEGNPAPEYTFKDGIRLLENPRLGQSQTNSSTVNTKTGLQFNTVSK 184
DB |||||
144 ICTRAVLTCSEBDGPPSEYKFKDGVEMPLEPKSNRAFSNYSYTLNQTGLIFDPVSA 203

QY 185 LDTGEYSCEARNVGVYRRCPEK-RMQVDLLNIGIIAAVVAALVSVCGLGVCYQAQ 240
DB |||||
204 SDTGDTGTCQAQN--GY-ASPVKSDTVHMDAVELNMGVIAAVFVTLILGLALIFGIWFAY 260

QY 241 RKGYF--SKETSFOKSNSSSKATTMSEDFKHTSFII 276
DB |||||
261 SRGYFDRAKGTSNKKVYQPSARSDGEFKQTSSFLV 298

RESULT 4
JAM1_MOUSE

RL Biochem. Biophys. Res. Commun. 236:682-686 (1997).
 CC -!- FUNCTION: MAY PLAY A ROLE IN CELL-CELL RECOGNITION AND SIGNALING.
 CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -!- TISSUE SPECIFICITY: EXPRESSED IN NORMAL GASTROINTESTINAL
 CC EPITHELIUM AND IN 95% OF COLON CANCERS.
 CC -!- PTM: N-GLYCOSYLATED, CONTAINS APPROXIMATELY 8 KDA OF N-LINKED
 CC CARBOHYDRATE.
 CC -!- PTM: PALMITOYLATED.
 CC -!- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
 CC -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
 CC
 CC This SWISS-PROT entry is copyrighted. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL; U79725; AAC50957.1; -;
 CC Genew; HGNC:4445; GPA33.
 CC MIW; 602171; -;
 CC GO; GO:0005888; C:proteoglycan integral to plasma membrane; TAS.
 CC GO; GO:0004872; F:receptor activity; TAS.
 CC InterPro; IPR007110; Ig-like.
 CC InterPro; IPR003006; Ig MHC.
 CC InterPro; IPR003596; Ig_V.
 CC Pfam; PF00047; Ig; 2.
 CC SMART; SM00406; IGV; 1.
 CC PROSITE; PS0835; IG_LIKE; 2.
 CC Immunoglobulin domain; Lipoprotein; Palmitate; Glycoprotein;
 KW Transmembrane; Signal; Antigen.
 FT SIGNAL 1 21
 FT CHAIN 22 319 CELL SURFACE A33 ANTIGEN.
 FT DOMAIN 22 235 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 236 256 POTENTIAL.
 FT DOMAIN 257 319 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 22 134 IG-LIKE V-TYPE.
 FT DOMAIN 140 227 IG-LIKE C2-TYPE.
 FT DOMAIN 258 261 POLY-CYS.
 FT DISULFID 43 117 POTENTIAL.
 FT DISULFID 146 222 POTENTIAL.
 FT DISULFID 162 211 POTENTIAL.
 FT CARBOHYD 112 112 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 200 202 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 223 223 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SQ SEQUENCE 319 AA; 35632 MW; 98FC7AAF45C2408E CRC64;
 Query Match 16.3%; Score 231; DB 1; Length 319;
 Best Local Similarity 28.6%; Pred. No. 2e-12;
 Matches 72; Conservative 41; Mismatches 97; Indels 42; Gaps 11;
 QY 8 SAPKQDVVTAAXVQEAIALACKTPKTVKSR---LEWKKL-----GRSVFVYVQQT-LQ 58
 Db 23 SVETPQDVLRAQSQKSVTLPC-TVHTSTSSREGIIQWDKLLLTHTERVVIFPNKNIYH 81
 QY 59 GD-FKNR-----AEMIDFNIRIKNVRSDAGKRCVPSAPSEQQNLEEDT---VILEV 108
 Db 82 GELYKNRVSISNNAEQSDASITIDQLTWADNGTYECSVLSMD---LEGNTKSRVLLV 137
 QY 109 LVAPAVPSCVPSALSGLTVVELRCQKEGNPAPEYTFWFKDGIHLLNPRIGSQSTNSY 168
 Db 138 LVPPSPKECGIEGTIIIGNNIQLTCSQKEGSPTPQYSWKRYNINLQBPQAQSPGQPS 197
 QY 169 TMTNKTQTLQNTVSKLDTGEYSCEARNVGYRRCF-GKRMQVDNLNIS-----GIIA 220
 Db 198 LKNISTDT-----SGYICTSSNEGTQFCNITVAVRSPSMNVALYVGIAGVGA 247
 QY 221 AVVVVALVISVC 232
 Db 248 ALIIIGIIIVCC 259

RESULT 6
 CXAR HUMAN STANDARD; PRT; 365 AA.
 ID CXAR_HUMAN STANDARD; PRT; 365 AA.
 AC P78310; O00694;
 DT 30-MAY-2000 (Rel. 39, Created)
 DT 30-MAY-2000 (Rel. 39, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Coxsackievirus and adenovirus receptor precursor (Coxsackievirus B-
 DE adenovirus receptor) (hCAR) (CVB3 binding protein).
 GN CXADR OR CAR.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97190109; PubMed=9036860;
 RA Bergelson J.M., Cunningham J.A., Droguett G., Kurt-Jones E.,
 RA Krithivas A., Hong J.S., Horwitz M.S., Crowell R.L., Finberg R.W.;
 RT "Isolation of a common receptor for Coxsackie B viruses and
 RT adenoviruses 2 and 5";
 RL Science 275:1320-1323 (1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97250541; PubMed=9096397;
 RA Tomko R.P., Xu R., Philipson L.;
 RT "hCAR and MCAR: the human and mouse cellular receptors for subgroup C
 RT adenoviruses and group B coxsackieviruses";
 RL Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356 (1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=20008750; PubMed=10543405;
 RA Bowles K.R., Gibson J., Wu J., Shaffer L.G., Towbin J.A.,
 RA Bowles N.E.;
 RT "Genomic organization and chromosomal localization of the human
 RT Coxsackievirus B-adenovirus receptor gene";
 RL Hum. Genet. 105:354-359 (1999).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX Anderson C.W., Kieleczawa J., Dunn J.J., Freimuth P.;
 RT "Sequence and expression of CXADR, the human gene for the
 RT coxsackievirus and adenovirus receptor";
 RL Submitted (OCT-1999) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RX Anderson B., Tomko R., Andersson K., Darban H., Oncu D., Mizra M.,
 RX Sollerbrant K., Sonhammer E., Philipson L.;
 RT "Putative regulatory domains in the human and mouse CAR genes";
 RL Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.
 RN [6]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Cervix;
 RX MEDLINE=22388257; PubMed=12477932;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettelman M., Maman A., Rodriguez S., Sanchez A.,
 RA Whiting M., Maman A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length
 RT human and mouse cDNA sequences";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).

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CC CC -!- FUNCTION: SERVES AS A RECEPTOR FOR GROUP B COXSACKIEVIRUSES AND
CC CC SUBGROUP C OF ADENOVIRUSES (AD2 AND AD5).
CC CC -!- SUBCELLULAR LOCATION: Type 1 membrane protein.
CC CC -!- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
CC CC -----
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CC CC -----
CC DR EMBL; Y07593; CAA68868.1; -
CC DR EMBL; U90716; AAC51234.1; -
CC DR EMBL; AF169366; AAF05908.1; -
CC DR EMBL; AF169360; AAF05908.1; JOINED.
CC DR EMBL; AF169361; AAF05908.1; JOINED.
CC DR EMBL; AF169362; AAF05908.1; JOINED.
CC DR EMBL; AF169363; AAF05908.1; JOINED.
CC DR EMBL; AF169364; AAF05908.1; JOINED.
CC DR EMBL; AF169365; AAF05908.1; JOINED.
CC DR EMBL; AF200465; AAF24344.1; -
CC DR EMBL; AF242865; AAG01088.1; -
CC DR EMBL; AF242862; AAG01088.1; JOINED.
CC DR EMBL; AF242864; AAG01088.1; JOINED.
CC DR EMBL; BC003684; AAH03684.1; -
CC DR EMBL; BC010536; AAH10536.1; -
CC DR PDB; 1EJ; 13-JUL-01.
CC DR PDB; 1FSW; 08-NOV-00.
CC DR PDB; 1KAC; 24-NOV-99.
CC DR Genew; HGNC:2559; CXADR.
CC DR MIM; 602621; -
CC DR GO; GO:0005887; C:integral to plasma membrane; TAS.
CC DR GO; GO:0004872; P:receptor activity; TAS.
CC DR InterPro; IPR007110; IG-like.
CC DR InterPro; IPR003598; IG_C2.
CC DR InterPro; IPR003006; IG_MHC.
CC DR Pfam; PF00047; IG; 2.
CC DR SMART; SM00408; IGC2; 1.
CC DR PROSITE; PS50835; IG LIKE; 2.
CC KW Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
KW Repeat; 3D-structure.
FT SIGNAL 1 19
FT CHAIN 20 365
FT DOMAIN 20 237
FT TRANSMEM 238 258
FT DOMAIN 259 365
FT DOMAIN 20 134
FT DOMAIN 141 228
FT DISULFID 41 120
FT DISULFID 162 212
FT CARBOHYD 106 106
FT CARBOHYD 201 201
FT SEQUENCE 365 AA; 40029 MW; AB01C634C6B7E664 CRC64;
Query Match 13.4%; Score 190.5; DB 1; Length 365;
Best Local Similarity 23.5%; Pred. No. 6.4e-09;
Matches 64; Conservative 52; Mismatches 117; Indels 39; Gaps 8;
QY 4 AYGSAPKDDQVAVVXQAEILACK---TPKTVXSLW-----KKLGRSVFVY 53
DB 17 ARSLITTPPEEMIEKAGETAYLPCKFTLSPEOQGLDIEWLISPADNQKVDQ-VIIYS 75
QY 54 QQTLLQGD-----KNRAEMIDFNIRIKNTRSDAGKYCEVSAPSEQGNLEED 102
DB 76 GDKIYDDVYPLDKGRVHFTSNDLKSGDASINVTLQLSDIGTYQCKV---KKAPGVANK 131
QY 103 TVTLEVLVAPVPCSEVPSSALSGTVTVLRCQDKEGNPAPYTFWKGIRLLENPLRGSQ 162
DB 132 KIHLLVWLKPSGARYCYDGSSEIGSDFKICEPKESGLPLQYEQK-----LSDSQ 182
QY 163 STNSSYTMNTKGTLTQNTVTSKLDGTGEVSCARNVGVRCRPGKRMQVDDLNLISGITA-A 221

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Db 183 KMPTSLAEMTSSVSVKNASSEYSGTCTVRNRVGSQCLLRNLNVPPSKAGLIAGA 242
QY 222 VVVVALVIVSCLGVGYAQKGYFSKETSFK 253
Db 243 IIGTLLALALIGLIIFCCRRK---RREEKYK 271

RESULT 7
FAS2_DROME
ID FAS2_DROME STANDARD; PRT; 873 AA.
AC P34082; P34083; Q9W4M6;
DT 01-FEB-1994 (Rel. 28, Created)
DT 01-FEB-1994 (Rel. 28, Last sequence update)
DE 15-SEP-2003 (Rel. 42, Last annotation update)
DE Fasciclin II precursor (FAS II).
GN FAS2 OR EG:EG0007.3 OR CG3665.
OS Drosophila melanogaster (Fruit fly).
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
OC Ephydroidea; Drosophilidae; Drosophila.
OX NCBI_TaxID=7227;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2), FUNCTION, SUBCELLULAR LOCATION,
RP AND TISSUE SPECIFICITY.
RC STRAIN=Canton-S;
RX MEDLINE=92005695; PubMed=1913818;
RA Grenningloh G., Rehm E.J., Goodman C.S.;
RT "Genetic analysis of growth cone guidance in Drosophila: fasciclin II
RT functions as a neuronal recognition molecule.";
RL Cell 67:45-57(1991).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Berkely;
RX MEDLINE=20196006; PubMed=10731132;
RA Adams M.D., Celnik S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Brandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Wan K.H., Doyle C., Baxter E.G., Helt J.G., Nelson C.R., Miklos G.L.G.,
RA Abril J.F., Agbayani A., An H.-J., Andrews-Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.V., Bencos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Borkova D., Botchan M.R., Bouck J., Brokstein P., Brotter P.,
RA Burtis K.C., Buesam D.A., Butler H., Cadieu E., Center A., Chandra I.,
RA Cherry J.M., Ciesla S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Durbin K.J., Evangelista C.C., Ferraz C., Ferreira S., Fleischmann W.,
RA Florea C., Gabrielian A.E., Garg N.S., Gelbart W.M., Glasser K.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris K.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwam C.,
RA Jalali M., Kalush F., Karpen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Liang Y., Leiby Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
RA Liu X., Mattai B., McIntosh T.C., McLeod M.P., McPherson D.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshrefi A.,
RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacle J.M.,
RA Palazzolo M., Pittman G.S., Pan S., Pollard J.J., Puri V., Reese M.G.,
RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
RA Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X.,
RA Wang Z.-Y., Wassarman D.A., Weinstock G.M., Weissbach J.,
RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L.,
RA Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Zhu H.,
RA Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.;
RT "The genome sequence of Drosophila melanogaster.";
RL Science 287:2185-2195(2000).

```

RN [3]
 RP REVISIONS, AND ALTERNATIVE SPLICING.
 RC STRAIN=Berkeley; PubMed=12537572;
 RX MEDLINE=22436069; PubMed=12537572;
 RA Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S.,
 RA Hradecky P., Huang Y., Kaninker J.S., Millburn G.H., Prochnik S.E.,
 RA Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Berman B.P.,
 RA Bettencourt B.R., Celniker S.E., de Grey A.D.N.J., Drysdale R.A.,
 RA Harris N.L., Richter J., Russo S., Schroeder A.J., Shu S.Q.,
 RA Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
 RA Lewis S.E.;
 RT "Annotation of the Drosophila melanogaster euchromatic genome: a
 RT systematic review";
 RL Genome Biol. 3:RESEARCH0083.1-RESEARCH0083.22(2002).
 RN [4]
 RP SEQUENCE OF 22-873 FROM N.A.
 RC STRAIN=Oregon-R;
 RX MEDLINE=20196011; PubMed=10731137;
 RA Benos P.V., Gatt M.K., Ashburner M., Murphy L., Harris D.,
 RA Barrell B.G., Ferraz C., Vidal S., Brun C., Demailles J., Cadieu E.,
 RA Dreano S., Gloux S., Lelaure V., Mottier S., Galibert F., Borkova D.,
 RA Minana B., Kafatos F.C., Louis C., Siden-Kiamos I., Bolshakov S.,
 RA Papagiannakis G., Spanos L., Cox S., Madueno E., de Pablo B.,
 RA Modolell J., Peter A., Schoettler P., Werner M., Mourikioti F.,
 RA Beinert N., Dowe G., Schaefer U., Jaekle H., Bucheton A.,
 RA Callister D.M., Campbell L.A., Darlamitsou A., Henderson N.S.,
 RA McMillan P.J., Salles C., Tait E.A., Valenti P., Saunders R.D.C.,
 RA Glover D.M.;
 RT "From sequence to chromosome: the tip of the X chromosome of D.
 RT melanogaster";
 RL Science 287:2220-2222(2000).
 CC -!- FUNCTION: Neuronal recognition molecule for the MP1 axon pathway,
 CC pathway recognition for axons during the development of nerve
 CC fascicles.
 CC -!- SUBCELLULAR LOCATION: Type I membrane protein (isoform 1);
 CC attached to the membrane by a GPI-anchor (isoform 2).
 CC -!- ALTERNATIVE PRODUCTS:
 CC Event=Alternative splicing; Named isoforms=3;
 CC Comment=Experimental confirmation may be lacking for some
 CC isoforms;
 CC Name=1; Synonyms=A, Membrane-linked;
 CC IsoId=P34082-1; Sequence=displayed;
 CC Name=2; Synonyms=C, Phosphatidylinositol-linked;
 CC IsoId=P34082-2; Sequence=VSP_002508, VSP_002509;
 CC Name=3; Synonyms=B;
 CC IsoId=P34082-3; Sequence=VSP_002506, VSP_002507;
 CC -!- TISSUE SPECIFICITY: In embryos, both isoforms are initially
 CC expressed on the surface of the axons in the MPI pathway and later
 CC on several other longitudinal axon fascicles.
 CC -!- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
 CC -!- SIMILARITY: Contains 2 fibronectin type III domains.
 CC -----
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 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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 CC -----
 CC EMBL; M77165; AAA28527.1; -;
 CC EMBL; M77166; AAA28528.1; -;
 CC EMBL; AL033125; CAA21825.1; -;
 CC EMBL; AE003430; AAF45925.2; -;
 CC EMBL; AE003430; RAN09119.1; -;
 CC EMBL; AL033125; CAA21826.1; -;
 CC F01; A41054; A41054.
 CC FlyBase; FBgn000635; Fae2.
 CC DR GO; GO:0005886; C:plasma membrane; IDA.
 CC DR GO; GO:0007156; P:homophilic cell adhesion; IDA.
 CC DR GO; GO:0007611; P:learning and/or memory; IMP.
 CC DR GO; GO:0016319; P:mushroom body development; IMP.
 CC DR GO; GO:0008038; P:neuronal cell recognition; IDA.

DR GO; GO:0045473; P:response to ethanol (sensu insecta); NAS.
 DR InterPro; IPR003961; FN III.
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003598; Ig_C2.
 DR InterPro; IPR003006; Ig_MHC.
 DR Pfam; PF00041; fn3; 2.
 DR Pfam; PF00047; ig; 5.
 DR SMART; SM00060; FN3; 2.
 DR SMART; SM00408; IG2; 3.
 DR PROSITE; PSS0835; IG-LIKE; 5.
 DR Cell adhesion; Glycoprotein; Repeat; Alternative splicing;
 KW Immunoglobulin domain; Transmembrane; GPI-anchor; Signal;
 KW Neurogenesis.
 FT SIGNAL 1 28 POTENTIAL.
 FT CHAIN 29 873 FASCICLIN II.
 FT DOMAIN 29 751 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 752 769 POTENTIAL.
 FT DOMAIN 770 873 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 31 131 IG-LIKE C2-TYPE 1.
 FT DOMAIN 138 223 IG-LIKE C2-TYPE 2.
 FT DOMAIN 230 318 IG-LIKE C2-TYPE 3.
 FT DOMAIN 323 423 IG-LIKE C2-TYPE 4.
 FT DOMAIN 428 520 IG-LIKE C2-TYPE 5.
 FT DOMAIN 544 619 FIBRONECTIN TYPE-III 1.
 FT DOMAIN 648 705 FIBRONECTIN TYPE-III 2.
 FT DISULFID 159 207 POTENTIAL.
 FT DISULFID 251 302 POTENTIAL.
 FT DISULFID 343 407 POTENTIAL.
 FT DISULFID 451 504 POTENTIAL.
 FT CARBOHYD 74 74 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 250 250 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 330 330 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 448 448 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 458 458 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT CARBOHYD 576 576 N-LINKED (GLCNAC. .) (POTENTIAL).
 FT VARSPLIC 737 773 GUIDVQVABRQVSSAIVGIAIGVLLLFVVDLLC ->
 FT DNPSPSTGNAQLLVITALTMLLLPPTHTA (in
 FT isoform 3).
 FT /FTId=VSP_002506.
 FT Missing (in isoform 3).
 FT /FTId=VSP_002507.
 FT IDVIOAQRQVSSAIVGIAIGVLLLFVVDLLCCITVH
 FT MGVMTACMKAKRSPSEIDDEAKLGSQVKEP -> ESDS
 FT ANNGLTLYSAGVSGVGHKRLFTTTTTTATSTTIT
 FT SITTTATTTITLTTTISITLLSVLASMIA (in isoform
 FT 2).
 FT /FTId=VSP_002508.
 FT Missing (in isoform 2).
 FT /FTId=VSP_002509.
 FT S -> R (IN REF. 4; CAA21826).
 FT CONFLICT 804 804
 FT SEQUENCE 873 AA; 96926 MW; E48F0484CCE62AC9 CRC64;
 SQ
 Query Match 13.1%; Score 186; DB 1; Length 873;
 Best Local Similarity 24.6%; Pred. No. 4.5e-08;
 Matches 67; Conservative 50; Mismatches 101; Indels 54; Gaps 13;
 QY 8 SAPKQQVVTVXVQDAILACKT---PKTAVASRLWKKLK---RSVFFVYQQTILQGD 61
 142 NAPENQPTLG---QDYVVMCEVKADNPNTI---DMLRNGDPIRTNDKYVVT----- 189
 DB
 QY 62 KRAEMIDPNIRIKNVTSDAGKYRCEVSAPSEQGNLEEDVTLEVLVAPVAPVCEVPS 121
 190 -----NGLLRNVQSEDEGIYTCR-AAVITETGELLER-TIRVEVFQPEIISPTNL 239
 QY 122 SALSGTWVLERCQDKGNPAPEYTWFKGIRLLENPRLGSSQTSNSSYTNWTKTQLQFNT 181
 240 EAVEGKFAANCTAR-GKVPFPEISWIRDTQL-----NVATDRFQNPQGLVTIIS 291
 DB
 QY 182 VSKLDTGEYSCEARNVGYRRCPGK-----RMQVDDL-NISGIIAAVVVVVALVISVCGLG 235
 292 VSQDDYGTVTCLAKNRAGVVDQKTKLVILVRQIYELVNTVGTARTKEIAI----- 341

QY 236 VCAYORKGYFSKETSFKNSSSKATTMSND 267
 Db 342 TCRA--KGRPAITERRWGTEYVNGQDD 371

RESULT 8
 CXAR_MOUSE
 ID CXAR_MOUSE STANDARD; PRT; 365 AA.
 AC P97792; O09052;
 DT 30-MAY-2000 (Rel. 39, Last sequence update)
 DT 30-MAY-2000 (Rel. 39, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Coxsackievirus and adenovirus receptor homolog precursor (mCAR).
 GN CXADR OR CAR.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OC NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Liver;
 RX MEDLINE=97190109; PubMed=9036860;
 RA Bergelson J.M., Cunningham J.A., Droguett G., Kurt-Jones E.,
 RA Krithivas A., Hong J.S., Horwitz M.S., Crowell R.L., Finberg R.W.;
 RT "Isolation of a common receptor for Coxsackie B viruses and
 RT adenoviruses 2 and 5.";
 RL Science 275:1320-1323(1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C3H/MAI;
 RX MEDLINE=97250541; PubMed=9096397;
 RA Tomko R.P., Xu R., Philipson L.;
 RT "HCAR and MCAR: the human and mouse cellular receptors for subgroup C
 RT adenoviruses and group B coxsackieviruses.";
 RL Proc. Natl. Acad. Sci. U.S.A. 94:3352-3356(1997).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Liver;
 RA Bergelson J.M., Krithivas A., Crowell T.L., Finberg R.W.;
 RT "The murine CAR homologue (mCAR) is a receptor for coxsackie B
 RT viruses and adenoviruses.";
 RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
 CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -1- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
 CC
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 CC
 CC EMBL; Y10320; CAA71368.1; -
 CC EMBL; U90715; AAC53148.1; -
 CC EMBL; Y11925; CAA72679.1; -
 CC MGD; MGI:1201679; Cxadr.
 CC InterPro; IPR007110; Ig-like.
 CC InterPro; IPR003598; Ig C2.
 CC InterPro; IPR003006; Ig_MHC.
 CC Pfam; PF00047; Ig; 2.
 CC SMART; SM00408; IGC2; 1.
 CC PROSITE; PS00835; IG_LIKE; 2.
 KW Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
 KW Repeat.
 FT SIGNAL.
 FT CHAIN 1 19 POTENTIAL.
 FT CHAIN 20 365 COXSACKIEVIRUS AND ADENOVIRUS RECEPTOR
 FT HOMOLOG.
 FT DOMAIN 20 237 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 238 258 POTENTIAL.
 FT DOMAIN 259 365 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 20 136 IG-LIKE C2-TYPE 1.
 FT DOMAIN 141 228 IG-LIKE C2-TYPE 2.

FT DISULFID 41 120 BY SIMILARITY.
 FT DISULFID 162 212 BY SIMILARITY.
 FT CARBOHYD 106 106 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 201 201 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CONFLICT 340 365 VAAPNLSRMGAVPVNIPQAQKGSIV -> FKYAYKTGKIT
 VV (IN REF. 2 AND 3).
 SQ SEQUENCE 365 AA; 39947 MW; 544584B52A34B2A2 CRC64;

Query Match 12.7%; Score 180; DB 1; Length 365;
 Best Local Similarity 23.7%; Pred. No. 5e-08;
 Matches 75; Conservative 44; Mismatches 130; Indels 68; Gaps 9;

QY 6 GFSAKPKQQVVTVAVKYOEAAILACK---TPKKTAVASRLFW-----KKLGRSVSFVY---- 52
 Db 19 GLSITTEPQRIEAKAGETAYLPCKFTLSPEQDGLDIEMLSPSDNIQVDDVILYSGDK 78
 QY 53 -----YQOTLQDGF---KNRAEMIDFNIRKNVTRSDAGKYFCEVSAPSEQONLEEDTVT 105
 Db 79 IYDNYYPDLKGRVHFTSNDVKSGDASINVTNLQLSDIGTYQCKV-----KKAPGVANKKFL 134
 QY 106 LEVLVAPAVPSCVPSALLSGTVVVELRCODEKGNPAPEYTFKDGIRLLENPRLGSSQSTN 165
 Db 135 LTVLVKPSGTRCFVDGSEIEGNDPKLCKEPKESGLPQFEW-----QKLS 179
 QY 166 SSVYTMNT-----KTGTLQFNVTSKLDTGEYSCEARNISVYRCPCGRKMQVDDLNISGII 219
 Db 180 DSQTMPTFWLAEMTSPVISVKNASSEYSGTYSCTVQNRVGSDDQCMRLDLDVPPSNRAGTI 239
 QY 220 AAVVW---VALVISVCGLVGYCAQR-----KGYSKETSFKQKNS 256
 Db 240 AGAVIGTLLALVLGAILFCCHRRKREEKVEVHHDIREVDVPPPKSRSTARSVIGSNH 299
 QY 257 SSRKATTMSNDFKHTKS 273
 Db 300 SSLGSMSPSNMGEYSKT 316

RESULT 9
 UN89 CAEEL
 ID UN89 CAEEL STANDARD; PRT; 6632 AA.
 AC O01761; Q17362;
 DT 15-SEP-2003 (Rel. 42, Created)
 DT 15-SEP-2003 (Rel. 42, Last sequence update)
 DT 15-SEP-2003 (Rel. 42, Last annotation update)
 DE Muscle M-line assembly protein unc-89 (Uncoordinated protein 89).
 DE UNC-89 OR C99D1.1.
 OS Caenorhabditis elegans.
 OC Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
 OC Rhabditidae; Peloderinae; Caenorhabditis.
 OC NCBI_TaxID=6239;
 RN [1]
 RP SEQUENCE FROM N.A., FUNCTION, AND TISSUE SPECIFICITY.
 RC STRAIN=Bristol N2;
 RX MEDLINE=96180278; PubMed=8603916;
 RA Benian G.M., Tinley T.L., Tang X., Borodovsky M.;
 RT "The Caenorhabditis elegans gene unc-89, required for muscle M-line
 RT assembly, encodes a giant modular protein composed of ig and signal
 RT transduction domains.";
 RL J. Cell Biol. 132:835-848(1996).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Bristol N2;
 RX Du Z., Le T.T., Wilson R.;
 RL Submitted (MAY-1997) to the EMBL/GenBank/DBJ databases.
 RN [3]
 RP REVISIONS.
 RA Waterston R.;
 RL Submitted (APR-2002) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: Structural component of the muscle M-line. Myofilament
 CC lattice assembly begins with positional cues laid down in the
 CC basement membrane and muscle cell membrane. UNC-89 responds to
 CC these signals, localizes, and then participates in assembling an
 CC M-line.


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QY 120 P-----SSALSGTVLRCQDKGPNAPBYTFKDGIRLLENPRLSQST 164
Db 3920 PDFLOPKVPAVTVGTAVLEGGI-----SGKPKSVKWKYNGEELKPSDRVKIE-- 3969
QY 165 NSSYTWNTKTGTLOFN-TVSKL-DTGEYSCEARNVSG 199
Db 3970 -----NLDGQTRLTVTNKLLDDMDVRCASNEFG 4000

RESULT 10
CEA6 HUMAN
ID CEA6 HUMAN STANDARD; PRT; 344 AA.
AC P40199; Q14920;
DT 01-FEB-1995 (Rel. 31, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Carcinoembryonic antigen-related cell adhesion molecule 6 precursor
DE (Normal cross-reacting antigen) (Nonspecific crossreacting antigen)
DE (CD66c antigen).
GN CEA6M6 OR NCA.
OS Homo sapiens (Human)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=89122014; PubMed=3220478;
RA Barnett T., Goebel S.J., Nethurdt M.A., Elting J.J.;
RT "Carcinoembryonic antigen family: characterization of cDNAs coding
RT for NCA and CEA and suggestion of nonrandom sequence variation in
RT their conserved loop-domains.";
RL Genomics 3:59-66 (1988).
RN [2]
RP SEQUENCE FROM N.A.
RX TISSUE=Lung carcinoma;
RA Tawaragi Y., Oikawa S., Matsuo K., Kozaki G., Nakazato H.;
RX MEDLINE=88106638; PubMed=3337731;
RT "Primary structure of nonspecific crossreacting antigen (NCA), a
RT member of carcinoembryonic antigen (CEA) gene family, deduced from
RT cDNA sequence.";
RL Biochem. Biophys. Res. Commun. 150:89-96 (1988).
RN [3]
RP SEQUENCE FROM N.A.
RX TISSUE=Pancreas;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bobak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahy J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalls D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY. CEA
CC SUBFAMILY.
CC -1- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -1- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
CC -1- DATABASE: NAMES=PROW; NOTE=CD guide CD66c entry;
CC WWW="http://www.ncbi.nlm.nih.gov/prov/cd/cd66c.htm".

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CC EMBL; M29541; AAA59915.1; -.
CC EMBL; M18728; AAA59907.1; -.
CC EMBL; BC005008; AAH05008.1; -.
CC Genew; HGNC:1818; CEACAM6.
CC MIM; 163980; -.
CC DR GO; GO:0005887; C:integral to plasma membrane; TAS.
CC DR GO; GO:0007267; P:cell-cell signaling; TAS.
CC DR GO; GO:0007165; P:signal transduction; TAS.
CC DR InterPro; IPR007110; Ig-like.
CC DR InterPro; IPR003598; Ig_c2.
CC DR InterPro; IPR003006; Ig_MHC.
CC DR Pfam; PF00047; Ig_3.
CC DR SMART; SM00408; IGC2; 1.
CC DR PROSITE; PS50835; IG_LIKE; 2.
CC KW Immunoglobulin domain; Antigen; Signal; Glycoprotein; GPI-anchor;
CC Repeat.
CC FT SIGNAL 1 34 BY SIMILARITY.
CC FT CHAIN 35 320 CARCINOEMBRYONIC ANTIGEN-RELATED CELL
CC FT PROPEP 321 344 ADHESION MOLECULE 6.
CC FT LIPID 320 320 REMOVED IN MATURE FORM (BY SIMILARITY).
CC FT DOMAIN 35 142 GPI-ANCHOR (BY SIMILARITY).
CC FT DOMAIN 145 232 IG-LIKE V-TYPE.
CC FT DOMAIN 237 314 IG-LIKE C2-TYPE 1.
CC FT DISULFID 167 215 IG-LIKE C2-TYPE 2.
CC FT DISULFID 259 299 PROBABLE.
CC FT CARBOHYD 104 104 PROBABLE.
CC FT CARBOHYD 111 111 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 115 115 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 152 152 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 173 173 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 197 197 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 224 224 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 256 256 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 274 274 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 288 288 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 292 292 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CARBOHYD 309 309 N-LINKED (GLCNAC. .) (POTENTIAL).
CC FT CONFLICT 138 138 F -> L (IN REF. 1).
CC FT CONFLICT 239 239 V -> G (IN REF. 1).
CC SQ SEQUENCE 344 AA; 37237 MW; 4322C5D6E25849F5 CRC64;

Query Match 11.6%; Score 164; DB 1; Length 344;
Best Local Similarity 29.0%; Pred. No. 1.1e-06;
Matches 49; Conservative 25; Mismatches 61; Indels 34; Gaps 8;

QY 69 DFNIRIKNTRSDAGKYRCVSPSEQGNLESDTFTVLVPAVPSPCEVPSA--LSG 126
Db 197 NMTLTLLSVKNDAGSYECIQNPASNR--DPVTNLVYGDVPTIS-PSKANYRPG 252
QY 127 TVVELRCQDKGPNAPBYTFKDGIRLLENPRLSQSTNSYTWNTKTGTLOFNVSQKLD 186
Db 253 ENLNLSCN-AASNPPAQYSWFNG-----TFQOSTQLFIPNITVNN 293
QY 187 TGEYSCEARNVSGYRRCPG-KRMQVDDNLISG---IIAANVVVALVTSV 231
Db 294 SGSYMCQAHNS-----ATGLNRTTVMITVGSAPVLSAVATVGTITGV 337

RESULT 11
VGR2 MOUSE
ID VGR2 MOUSE STANDARD; PRT; 1367 AA.
AC P35918;
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)

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DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Vascular endothelial growth factor receptor 2 precursor (EC 2.7.1.112)
DE (VEGFR-2) (Protein-tyrosine kinase receptor flk-1) (Fetal liver kinase
DE 1) (Kinase NYK)
GN KDR OR FLK1 OR FLK-1.
OS Mus musculus (Mouse).
OC Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C; TISSUE=Embryo;
RX MEDLINE=93208880; PubMed=7681362;
RA Maller B., Witzmann-Voos S., Schurich H., Martinez R.,
RA Mueller N.P.H., Rieau W., Ullrich A.;
RT "High affinity VEGF binding and developmental expression suggest
RT Flk-1 as a major regulator of vasculogenesis and angiogenesis.";
RL Cell 72:835-846(1993).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C3H/He; TISSUE=Fetal liver;
RX MEDLINE=92020984; PubMed=1717995;
RA Mathews W., Jordan C.T., Gavin M., Jenkins N.A., Copeland N.G.,
RA Lenischka I.R.;
RT "A receptor tyrosine kinase cDNA isolated from a population of
RT enriched primitive hematopoietic cells and exhibiting close genetic
RT linkage to c-kit";
RL Proc. Natl. Acad. Sci. U.S.A. 88:9026-9030(1991).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=93141255; PubMed=8423988;
RA Oelrichs R.B., Reid H.H., Bernard O., Ziemiecki A., Wilks A.F.;
RT "NYK/PLK-1: a putative receptor protein tyrosine kinase isolated from
RT E10 embryonic neuroepithelium is expressed in endothelial cells of
RT the developing embryo";
RL Oncogene 8:11-18(1993).
RN [4]
RP SEQUENCE OF 1-15 FROM N.A.
RX MEDLINE=96032749; PubMed=7559454;
RA Patterson C., Perrella M.A., Hsieh C.-M., Yoshizumi M., Lee M.-E.,
RA Harber E.;
RT "Cloning and functional analysis of the promoter for KDR/flk-1, a
RT receptor for vascular endothelial growth factor.";
RL J. Biol. Chem. 270:23111-23118(1995).
RN [5]
RP FUNCTION.
RX MEDLINE=93361481; PubMed=8356051;
RA Quinn T.P., Peters K.G., de Vries C., Ferrara N., Williams L.T.;
RT "Fetal liver kinase 1 is a receptor for vascular endothelial growth
RT factor and is selectively expressed in vascular endothelium";
RL Proc. Natl. Acad. Sci. U.S.A. 90:7533-7537(1993).
CC -1- FUNCTION: RECEPTOR FOR VEGF OR VEGF-C. HAS A TYROSINE-PROTEIN
CC KINASE ACTIVITY. THE VEGF-KINASE LIGAND/RECEPTOR SIGNALING SYSTEM
CC PLAYS A KEY ROLE IN VASCULAR DEVELOPMENT AND REGULATION OF
CC VASCULAR PERMEABILITY.
CC -1- CATALYTIC ACTIVITY: ATP + a protein tyrosine = ADP + protein
CC tyrosine phosphate.
CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
CC -1- TISSUE SPECIFICITY: EXPRESSED AT HIGH LEVELS IN ADULT HEART, LUNG,
CC KIDNEY, BRAIN AND SKELETAL MUSCLE, BUT IS ALSO EXPRESSED AT LOWER
CC LEVELS IN MOST OTHER ADULT TISSUES.
CC -1- SIMILARITY: BELONGS TO THE CSF-1/PDGF RECEPTOR FAMILY OF TYROSINE-
CC PROTEIN KINASES.
CC -1- SIMILARITY: Contains 7 immunoglobulin-like C2-type domains.
CC
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DR EMBL; X70842; CAA50192.1; -;
DR EMBL; X59397; CAA42040.1; -;
DR EMBL; S53103; AAB25043.1; -;
DR EMBL; X89777; CAA61917.1; -;
DR PIR; A41228; A41228.
DR HSSP; P11362; IFGK.
DR MGD; MGI:96683; Kdr.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig_C2.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR000719; Prot_kinase.
DR InterPro; IPR001824; RTKinaseII.
DR Pfam; PF00047; ig; 6.
DR Pfam; PF00069; Pkinase; 1.
DR ProDom; PD000001; Prot_kinase; 2.
DR SMART; SM00408; IGC2; 1.
DR SMART; SM00219; TyrKc; 1.
DR PROSITE; PS0835; IG LIKE; 5.
DR PROSITE; PS00107; PROTEIN_KINASE_ATP; 1.
DR PROSITE; PS00111; PROTEIN_KINASE_DOM; 1.
DR PROSITE; PS00109; PROTEIN_KINASE_TYR; 1.
DR PROSITE; PS00240; RECEPTOR_TYR_KIN_III; 1.
KW Angiogenesis; Signal; Transferrase; Tyrosine-protein kinase; Receptor;
KW Transmembrane; Glycoprotein; Phosphorylation; ATP-binding;
KW Immunoglobulin domain; Repeat.
FT SIGNAL 1 19 POTENTIAL.
FT CHAIN 20 1367 VASCULAR ENDOTHELIAL GROWTH FACTOR
FT RECEPTOR 2.
FT DOMAIN 20 762 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 763 784 POTENTIAL.
FT DOMAIN 785 1367 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 46 111 IG-LIKE C2-TYPE 1.
FT DOMAIN 143 209 IG-LIKE C2-TYPE 2.
FT DOMAIN 226 325 IG-LIKE C2-TYPE 3.
FT DOMAIN 330 416 IG-LIKE C2-TYPE 4.
FT DOMAIN 423 542 IG-LIKE C2-TYPE 5.
FT DOMAIN 549 656 IG-LIKE C2-TYPE 6.
FT DOMAIN 665 751 IG-LIKE C2-TYPE 7.
FT DOMAIN 832 1160 PROTEIN KINASE.
FT NP_BIND 838 846 ATP (BY SIMILARITY).
FT BINDING 866 866 ATP (BY SIMILARITY).
FT ACT_SITE 1026 1026 BY SIMILARITY.
FT CARBOHYD 46 46 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 98 98 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 145 145 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 160 160 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 247 247 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 320 320 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 376 376 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 397 397 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 509 509 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 521 521 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 578 578 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 611 611 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 617 617 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 629 629 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 673 673 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 702 702 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 719 719 N-LINKED (GLCNAC. .) (POTENTIAL).
FT MOD_RES 1057 1057 PHOSPHORYLATION (AUTO-) (BY SIMILARITY).
FT CONFLICT 25 25 P -> T (IN REF. 1).
FT CONFLICT 679 679 G -> D (IN REF. 3).
FT CONFLICT 783 784 LV -> VL (IN REF. 1).
FT CONFLICT 917 917 S -> C (IN REF. 1).
FT CONFLICT 1341 1367 QLTSCLNGSGFVPAPPPTGNHGGAA -> RSPPV
(IN REF. 3).
SQ SEQUENCE 1367 AA; 152516 MW; EFC99704FIDCA266 CRC64;

Query Match 11.3%; Score 160.5; DB 1; Length 1367;
Best Local Similarity 24.8%; Pred. No. 1.1e-05;
Matches 53; Conservative 23; Mismatches 75; Indels 63; Gaps 6;

DR	EMBL; AF001287; AAB69125.1; -	FT	CHAIN	20	837	FT	DOMAIN	20	697	FT	TRANSMEM	698	718	FT	DOMAIN	719	837	FT	DOMAIN	21	108	FT	DOMAIN	113	202	FT	DOMAIN	208	297	FT	DOMAIN	302	396	FT	DOMAIN	401	491	FT	DOMAIN	482	581	FT	DOMAIN	594	678	FT	DISULFID	132	93	FT	DISULFID	136	186	FT	DISULFID	232	281	FT	DISULFID	322	380	FT	DISULFID	422	475	FT	CARBOHYD	177	177	FT	CARBOHYD	219	219	FT	CARBOHYD	309	309	FT	CARBOHYD	406	406	FT	CARBOHYD	419	419	FT	CARBOHYD	445	445	FT	CARBOHYD	474	474	FT	CARBOHYD	562	562	FT	VARSPPLIC	594	837																																			
DR	EMBL; AF001286; AAB69124.1; -	DR	EMBL; AF016619; AAC53375.1; -	DR	MGD; MGI:97282; Ncam2	DR	InterPro; IPR003961; FN III	DR	InterPro; IPR007110; Ig-like	DR	InterPro; IPR003598; Ig_c2	DR	Pfam; PF00041; fn3; 2	DR	Pfam; PF00047; ig; 5	DR	SMART; SM00060; FN3; 2	DR	SMART; SM00408; IGC2; 5	DR	PROSITE; PS50835; IG_LIKE; 5	KW	Cell adhesion; Transmembrane;	KW	Immunoglobulin domain; Signal;	FT	CHAIN	1	19	FT	DOMAIN	20	837	FT	EXTRACELLULAR	(POTENTIAL)	FT	CHAIN	20	837	FT	DOMAIN	20	697	FT	TRANSMEM	698 <td>718</td> <td>FT</td> <td>DOMAIN</td> <td>719</td> <td>837</td> <td>FT</td> <td>DOMAIN</td> <td>21</td> <td>108</td> <td>FT</td> <td>DOMAIN</td> <td>113</td> <td>202</td> <td>FT</td> <td>DOMAIN</td> <td>208</td> <td>297</td> <td>FT</td> <td>DOMAIN</td> <td>302</td> <td>396</td> <td>FT</td> <td>DOMAIN</td> <td>401</td> <td>491</td> <td>FT</td> <td>DOMAIN</td> <td>482</td> <td>581</td> <td>FT</td> <td>DOMAIN</td> <td>594</td> <td>678</td> <td>FT</td> <td>DISULFID</td> <td>132</td> <td>93</td> <td>FT</td> <td>DISULFID</td> <td>136</td> <td>186</td> <td>FT</td> <td>DISULFID</td> <td>232</td> <td>281</td> <td>FT</td> <td>DISULFID</td> <td>322</td> <td>380</td> <td>FT</td> <td>DISULFID</td> <td>422</td> <td>475</td> <td>FT</td> <td>CARBOHYD</td> <td>177</td> <td>177</td> <td>FT</td> <td>CARBOHYD</td> <td>219</td> <td>219</td> <td>FT</td> <td>CARBOHYD</td> <td>309</td> <td>309</td> <td>FT</td> <td>CARBOHYD</td> <td>406</td> <td>406</td> <td>FT</td> <td>CARBOHYD</td> <td>419</td> <td>419</td> <td>FT</td> <td>CARBOHYD</td> <td>445</td> <td>445</td> <td>FT</td> <td>CARBOHYD</td> <td>474</td> <td>474</td> <td>FT</td> <td>CARBOHYD</td> <td>562</td> <td>562</td> <td>FT</td> <td>VARSPPLIC</td> <td>594</td> <td>837</td>	718	FT	DOMAIN	719	837	FT	DOMAIN	21	108	FT	DOMAIN	113	202	FT	DOMAIN	208	297	FT	DOMAIN	302	396	FT	DOMAIN	401	491	FT	DOMAIN	482	581	FT	DOMAIN	594	678	FT	DISULFID	132	93	FT	DISULFID	136	186	FT	DISULFID	232	281	FT	DISULFID	322	380	FT	DISULFID	422	475	FT	CARBOHYD	177	177	FT	CARBOHYD	219	219	FT	CARBOHYD	309	309	FT	CARBOHYD	406	406	FT	CARBOHYD	419	419	FT	CARBOHYD	445	445	FT	CARBOHYD	474	474	FT	CARBOHYD	562	562	FT	VARSPPLIC	594	837
DR	EMBL; AF001285; AAB69123.1; -	DR	EMBL; AF016618; AAC53374.1; -	DR	MGD; MGI:97281; Ncam1	DR	InterPro; IPR003960; FN III	DR	InterPro; IPR007109; Ig-like	DR	InterPro; IPR003597; Ig_c2	DR	Pfam; PF00040; fn3; 2	DR	Pfam; PF00046; ig; 5	DR	SMART; SM00059; FN3; 2	DR	SMART; SM00407; IGC2; 5	DR	PROSITE; PS50834; IG_LIKE; 5	KW	Cell adhesion; Transmembrane;	KW	Immunoglobulin domain; Signal;	FT	CHAIN	1	19	FT	DOMAIN	20	837	FT	EXTRACELLULAR	(POTENTIAL)	FT	CHAIN	20	837	FT	DOMAIN	20	697	FT	TRANSMEM	698 <td>718</td> <td>FT</td> <td>DOMAIN</td> <td>719</td> <td>837</td> <td>FT</td> <td>DOMAIN</td> <td>21</td> <td>108</td> <td>FT</td> <td>DOMAIN</td> <td>113</td> <td>202</td> <td>FT</td> <td>DOMAIN</td> <td>208</td> <td>297</td> <td>FT</td> <td>DOMAIN</td> <td>302</td> <td>396</td> <td>FT</td> <td>DOMAIN</td> <td>401</td> <td>491</td> <td>FT</td> <td>DOMAIN</td> <td>482</td> <td>581</td> <td>FT</td> <td>DOMAIN</td> <td>594</td> <td>678</td> <td>FT</td> <td>DISULFID</td> <td>132</td> <td>93</td> <td>FT</td> <td>DISULFID</td> <td>136</td> <td>186</td> <td>FT</td> <td>DISULFID</td> <td>232</td> <td>281</td> <td>FT</td> <td>DISULFID</td> <td>322</td> <td>380</td> <td>FT</td> <td>DISULFID</td> <td>422</td> <td>475</td> <td>FT</td> <td>CARBOHYD</td> <td>177</td> <td>177</td> <td>FT</td> <td>CARBOHYD</td> <td>219</td> <td>219</td> <td>FT</td> <td>CARBOHYD</td> <td>309</td> <td>309</td> <td>FT</td> <td>CARBOHYD</td> <td>406</td> <td>406</td> <td>FT</td> <td>CARBOHYD</td> <td>419</td> <td>419</td> <td>FT</td> <td>CARBOHYD</td> <td>445</td> <td>445</td> <td>FT</td> <td>CARBOHYD</td> <td>474</td> <td>474</td> <td>FT</td> <td>CARBOHYD</td> <td>562</td> <td>562</td> <td>FT</td> <td>VARSPPLIC</td> <td>594</td> <td>837</td>	718	FT	DOMAIN	719	837	FT	DOMAIN	21	108	FT	DOMAIN	113	202	FT	DOMAIN	208	297	FT	DOMAIN	302	396	FT	DOMAIN	401	491	FT	DOMAIN	482	581	FT	DOMAIN	594	678	FT	DISULFID	132	93	FT	DISULFID	136	186	FT	DISULFID	232	281	FT	DISULFID	322	380	FT	DISULFID	422	475	FT	CARBOHYD	177	177	FT	CARBOHYD	219	219	FT	CARBOHYD	309	309	FT	CARBOHYD	406	406	FT	CARBOHYD	419	419	FT	CARBOHYD	445	445	FT	CARBOHYD	474	474	FT	CARBOHYD	562	562	FT	VARSPPLIC	594	837
DR	EMBL; AF001284; AAB69122.1; -	DR	EMBL; AF016617; AAC53373.1; -	DR	MGD; MGI:97280; Ncam2	DR	InterPro; IPR003959; FN III	DR	InterPro; IPR007108; Ig-like	DR	InterPro; IPR003596; Ig_c2	DR	Pfam; PF00039; fn3; 2	DR	Pfam; PF00045; ig; 5	DR	SMART; SM00058; FN3; 2	DR	SMART; SM00406; IGC2; 5	DR	PROSITE; PS50833; IG_LIKE; 5	KW	Cell adhesion; Transmembrane;	KW	Immunoglobulin domain; Signal;	FT	CHAIN	1	19	FT	DOMAIN	20	837	FT	EXTRACELLULAR	(POTENTIAL)	FT	CHAIN	20	837	FT	DOMAIN	20	697	FT	TRANSMEM	698 <td>718</td> <td>FT</td> <td>DOMAIN</td> <td>719</td> <td>837</td> <td>FT</td> <td>DOMAIN</td> <td>21</td> <td>108</td> <td>FT</td> <td>DOMAIN</td> <td>1</td>	718	FT	DOMAIN	719	837	FT	DOMAIN	21	108	FT	DOMAIN	1																																																																													

DE (Neural- and thymus-derived activator for ERBB kinases) (NTAK)].

GN NRG2 OR NTAK.

OS Rattus norvegicus (Rat).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

OX NCBI_TaxID=10116;

RN [1]

RX SEQUENCE FROM N.A., SEQUENCE OF 128-162, AND ALTERNATIVE SPLICING,

RA MEDLINE=98006324; PubMed=9348101;

RA Higaehiyama S., Horikawa M., Yamada K., Ichino N., Nakano N.,

RA Nakagawa T., Miyagawa J., Matsushita N., Negateu T., Taniguchi N.,

RA Ishiguro H.;

RT "A novel brain-derived member of the epidermal growth factor family

RT that interacts with ErbB3 and ErbB4.";

RL J. Biochem. 122:675-680(1997).

RN [2]

RP SEQUENCE OF 109-868 FROM N.A. (ISOFORMS 6 AND 7).

RC TISSUE=Cerebellum;

RX MEDLINE=9731137; PubMed=9168114;

RA Chang H., Riese D.J. II, Gilbert W., Stern D.F., McMahon U.J.;

RT "Ligands for ErbB-family receptors encoded by a neurotrophin-like

RT gene.";

RL Nature 387:509-512(1997).

CC -1- FUNCTION: DIRECT LIGAND FOR ERBB3 AND ERBB4 TYROSINE KINASE

CC RECEPTORS. CONCOMITANTLY RECRUITS ERBB1 AND ERBB2 CORECEPTORS,

CC RESULTING IN LIGAND-STIMULATED TYROSINE PHOSPHORYLATION AND

CC ACTIVATION OF THE ERBB RECEPTORS. MAY ALSO PROMOTE THE

CC HETERODIMERIZATION WITH THE EGF RECEPTOR.

CC -1- SUBCELLULAR LOCATION: EXISTS AS AN TYPE I MEMBRANE PROTEIN AND AS

CC A PROTEOLYTICALLY RELEASED SOLUBLE GROWTH FACTOR FORM. THE

CC MEMBRANE-BOUND FORM DOES NOT SEEM TO BE ACTIVE (BY SIMILARITY).

CC -1- ALTERNATIVE PRODUCTS:

CC Event=Alternative splicing; Named isoforms=7;

CC Comment=Additional isoforms seem to exist. The alpha-type and

CC beta-type differ in the EGF-Like domain,

CC Name=1; Synonyms=NTAK-alpha1;

CC IsoId=O35569-1; Sequence=Displayed;

CC Name=2; Synonyms=NTAK-alpha2A;

CC IsoId=O35569-2; Sequence=VSP_003471;

CC Name=3; Synonyms=NTAK-alpha2B, NTAK-alpha2-1P;

CC IsoId=O35569-3; Sequence=VSP_003466, VSP_003471;

CC Name=4; Synonyms=NTAK-beta;

CC IsoId=O35569-4; Sequence=VSP_003470;

CC Name=5; Synonyms=NTAK-gamma;

CC IsoId=O35569-5; Sequence=VSP_003467, VSP_003468;

CC Name=6; Synonyms=NRG2-alpha;

CC IsoId=O35569-6; Sequence=VSP_003472, VSP_003473;

CC Name=7; Synonyms=NRG2-beta;

CC IsoId=O35569-7; Sequence=VSP_003465, VSP_003469;

CC -1- TISSUE SPECIFICITY: EXPRESSED IN MOST PARTS OF THE BRAIN,

CC ESPECIALLY THE OLFACTORY BULB AND CEREBELLUM WHERE IT LOCALIZES IN

CC GRANULE AND PURKINJE CELLS. IN THE HIPPOCAMPUS, FOUND IN THE

CC GRANULE CELLS OF THE DENTATE GYRUS. IN THE BASAL FOREBRAIN, FOUND

CC IN THE CHOLINERGIC CELLS. IN THE HINDRAIN, WEAKLY DETECTABLE IN

CC THE MOTOR TRIGEMINAL NUCLEUS. NOT DETECTED IN THE HYPOTHALAMUS.

CC ALSO FOUND IN THE LIVER AND IN THE THYMUS. NOT DETECTED IN HEART,

CC ADRENAL GLAND, OR TESTIS.

CC -1- DEVELOPMENTAL STAGE: IN THE EMBRYO, EXPRESSED IN THE BRAIN OF

CC E11.5 EMBRYOS WHERE IT IS FOUND IN THE TELECEPHALON, BUT NOT IN

CC THE HINDRAIN. NOT FOUND IN THE HEART. IN THE ADULT, FOUND IN

CC BRAIN AND THYMUS.

CC -1- DOMAIN: THE CYTOPLASMIC DOMAIN MAY BE INVOLVED IN THE REGULATION

CC OF TRAFFICKING AND PROTEOLYTIC PROCESSING. REGULATION OF THE

CC PROTEOLYTIC PROCESSING INVOLVES INITIAL INTRACELLULAR DOMAIN

CC DIMERIZATION (BY SIMILARITY).

CC -1- DOMAIN: ERBB RECEPTOR BINDING IS ELICITED ENTIRELY BY THE EGF-LIKE

CC DOMAIN (BY SIMILARITY).

CC -1- PTM: PROTEOLYTIC CLEAVAGE CLOSE TO THE PLASMA MEMBRANE ON THE

CC EXTERNAL FACE LEADS TO THE RELEASE OF THE SOLUBLE GROWTH FACTOR

CC FORM (BY SIMILARITY).

CC -1- PTM: EXTENSIVE GLYCOSYLATION PRECEDES THE PROTEOLYTIC CLEAVAGE (BY

CC SIMILARITY).

CC -1- SIMILARITY: Contains 1 EGF-like domain.

CC -1- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.

CC -1- SIMILARITY: BELONGS TO THE NEUREGULIN FAMILY.

CC -----

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CC -----

CC EMBL; D89995; BAA23344.1; -

CC EMBL; D89996; BAA23345.1; -

CC EMBL; D89997; BAA23346.1; -

CC EMBL; D89998; BAA23347.1; -

CC EMBL; AB001576; BAA23348.1; -

CC PIR; JC5701; JC5701.

CC PIR; JC5702; JC5702.

CC HSP; Q12784; 1HRE.

CC InterPro; IPR006209; EGF like.

CC InterPro; IPR008210; IEGF.

CC InterPro; IPR007110; Ig-like.

CC InterPro; IPR003598; Ig C2.

CC InterPro; IPR003006; Ig MHC.

CC InterPro; IPR002154; Neuregulin.

CC Pfam; PF00008; EGF; 1.

CC Pfam; PF00047; Ig; 1.

CC Pfam; PF02158; Neuregulin; 1.

CC SMART; SM00181; EGF; 1.

CC SMART; SM00408; IGG2; 1.

CC PROSITE; PS00022; EGF 1; 1.

CC PROSITE; PS01186; EGF-2; 1.

CC PROSITE; PS08835; IG-LIKE; 1.

CC Growth factor; EGF-like domain; Immunoglobulin domain; Glycoprotein;

CC Transmembrane; Multigene family; Alternative splicing.

CC PROPEP 1 127

CC CHAIN 128 868 PRO-NEUREGULIN-2, MEMBRANE-BOUND FORM.

CC CHAIN 128 428 NEUREGULIN-2.

CC DOMAIN 128 429 EXTRACELLULAR (POTENTIAL).

CC TRANSMEM 430 450 INTERNAL SIGNAL SEQUENCE (POTENTIAL).

CC DOMAIN 451 868 CYTOPLASMIC (POTENTIAL).

CC DOMAIN 253 348 IG-LIKE C2-TYPE.

CC DOMAIN 346 356 SER/THR-RICH.

CC DOMAIN 357 398 EGF-LIKE.

CC DOMAIN 22 32 POLY-SER.

CC DOMAIN 35 45 POLY-SER.

CC DOMAIN 56 59 POLY-THR.

CC DOMAIN 103 106 POLY-ALA.

CC DOMAIN 739 745 POLY-PRO.

CC DISULFID 273 327 BY SIMILARITY.

CC DISULFID 361 375 BY SIMILARITY.

CC DISULFID 369 386 BY SIMILARITY.

CC DISULFID 388 397 BY SIMILARITY.

CC CARBOHYD 33 33 N-LINKED (GLCNAC. .) (POTENTIAL).

CC CARBOHYD 34 34 N-LINKED (GLCNAC. .) (POTENTIAL).

CC CARBOHYD 163 163 N-LINKED (GLCNAC. .) (POTENTIAL).

CC CARBOHYD 294 294 N-LINKED (GLCNAC. .) (POTENTIAL).

CC CARBOHYD 362 362 N-LINKED (GLCNAC. .) (POTENTIAL).

CC VARSPLIC 1 108 Missing (in isoform 7).

CC VARSPLIC 220 222 PLV -> FPF (in isoform 3).

CC VARSPLIC 388 388 C -> G (in isoform 5).

CC VARSPLIC 389 868 Missing (in isoform 5).

CC VARSPLIC 390 412 Missing (in isoform 7).

CC VARSPLIC 390 421 NGFGGRCLEKPLRLYMPDPKQ -> VGYTGRCCQFAMV

CC VARSPLIC 414 421 NGFGGRCLEKPLRLYMPDPKQKHLGFELKE -> VGYTG

CC VARSPLIC 421 421 DRCCQFAMVNFSK (in isoform 4).

CC VARSPLIC 421 421 Missing (in isoform 2 and isoform 3).

```

FT  VARSPLIC 414 439 /FTid=VSP_003471.
FT  HIGFELKEAEELYQKRVLTITGICVA -> SVLMDTPGTGV
FT  SSSQWSTSPSTLDN (in isoform 6).
FT  /FTid=VSP_003472.
FT  VARSPLIC 440 868 Missing (in isoform 6).
FT  /FTid=VSP_003473.
FT  CONFLICT 117 117 S -> F (in REF. 2).
FT  CONFLICT 724 724 R -> H (in REF. 2).
SQ  SEQUENCE 868 AA; 93776 MW; 3C7D4D94DBE64DE2 CRC64;

Query Match
Best Local Similarity 27.7%; Pred. No. 1.3e-05; Length 868;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 44 LGRSVSFVYQOQLQD--FKNAEMIDFNIRIKNVTSDAGKYRCEVSAPEQOQNLEE 101
DB 123 : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 204 LERNQRYIFFLEPTQPLVFKTAFAVPDPN--GKNI-KKEVGKILCTDCATRPKLKMKMS 260
QY 102 DVTILEVLVAPVPCEVPSSALSCTGVVELRCQDEKGNPAPYTWFKGIRLLENPRLGS 161
DB 123 : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 261 QTGEV-----GEKQSLKCEAAGNPQPSYRWFKDGKELNR-----S 296
QY 162 OSTNSSYTMTKGTQLQNTVSKLDTGEYSCEARNVGVRRCPGKRMQVDDLN-----S 216
DB 123 : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 297 RDRIKYGNGRKNRSLQFNKVKVEDAGEYVCEENILKDTVRG-RLHVNVSVTTLSSWS 355
QY 217 GIIAAVVVALVISVGLGVGY 238
DB 123 : : : : : : : : : : : : : : : : : : : : : : : : : : : :
DB 356 GHARKCNETAKSYCVNG-GVCY 376

RESULT 14
NRG2_MOUSE
ID NRG2_MOUSE STANDARD; PRT; 756 AA.
AC P56974;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Pro-neuregulin-2 precursor (Pro-NRG2) (Contains: Neuregulin-2 (NRG-2)
DE (Derivative of neuregulin 1) (DON-1)).
GN NRG2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxId=10090;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORMS NRG2-5; NRG2-10 AND NRG2-16A).
RC STRAIN=C57BL/6; TISSUE=Brain;
RX MEDLINE=97311398; PubMed=9168115;
RA Caraway K.L.III, Weber J.L., Unger M.J., Ledesma J., Yu N.,
RA Gassmann M., Lal C.;
RT "Neuregulin-2, a new ligand of ErbB3/ErbB4-receptor tyrosine
RL kinases.";
RL Nature 387:512-516(1997).
RN [2]
RP SEQUENCE OF 150-756 FROM N.A. (ISOFORMS DON-1M AND DON-1S).
RC TISSUE=Choroid plexus;
RX MEDLINE=97342638; PubMed=9199335;
RA Busfield S.J., Michnick D.A., Chickering T.W., Revett T.L., Ma J.,
RA Woolf E.A., Comrack C.A., Dussault B.J., Woolf J., Goodearl A.D.J.,
RA Gearing D.P.;
RT "Characterization of a neuregulin-related gene, Don-1, that is highly
RL expressed in restricted regions of the cerebellum and hippocampus.";
RL Mol. Cell. Biol. 17:4007-4014(1997).
CC -1- FUNCTION: DIRECT LIGAND FOR ERBB3 AND ERBB4 TYROSINE KINASE
CC RECEPTORS. CONCOMITANTLY RECRUITS ERBB1 AND ERBB2 CORECEPTORS,
CC RESULTING IN LIGAND-STIMULATED TYROSINE PHOSPHORYLATION AND
CC ACTIVATION OF THE ERBB RECEPTORS. MAY ALSO PROMOTE THE
CC HETERODIMERIZATION WITH THE EGF RECEPTOR.
CC -1- SUBCELLULAR LOCATION: EXISTS AS AN TYPE I MEMBRANE PROTEIN AND AS
CC A PROTEOLYTICALLY RELEASED SOLUBLE GROWTH FACTOR FORM. THE
CC MEMBRANE-BOUND FORM DOES NOT SEEM TO BE ACTIVE (BY SIMILARITY).
CC -1- ALTERNATIVE PRODUCTS:

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CC Event=Alternative splicing; Named isoforms=4;
CC Comment=Additional isoforms seem to exist;
CC Name=NRG2-16A;
CC IsoId=P56974-1; Sequence=Displayed;
CC Name=DON-1M;
CC IsoId=P56974-2; Sequence=VSP_003464;
CC Name=DON-1S; Synonyms=NRG2-5;
CC IsoId=P56974-3; Sequence=VSP_003462; VSP_003463;
CC Name=NRG2-10;
CC IsoId=P56974-4; Sequence=VSP_003460; VSP_003461;
CC TISSUE SPECIFICITY: HIGHEST EXPRESSION IN THE BRAIN, WITH LOWER
CC LEVELS IN THE LUNG. IN THE CEREBELLUM, FOUND IN GRANULE AND
CC PURKINJE CELLS.
CC -1- DOMAIN: THE CYTOPLASMIC DOMAIN MAY BE INVOLVED IN THE REGULATION
CC OF TRAFFICKING AND PROTEOLYTIC PROCESSING. REGULATION OF THE
CC PROTEOLYTIC PROCESSING INVOLVES INITIAL INTRACELLULAR DOMAIN
CC DIMERIZATION (BY SIMILARITY).
CC -1- DOMAIN: ERBB RECEPTOR BINDING IS ELICITED ENTIRELY BY THE EGF-LIKE
CC DOMAIN (BY SIMILARITY).
CC -1- PTM: PROTEOLYTIC CLEAVAGE CLOSE TO THE PLASMA MEMBRANE ON THE
CC EXTERNAL FACE LEADS TO THE RELEASE OF THE SOLUBLE GROWTH FACTOR
CC FORM (BY SIMILARITY).
CC -1- PTM: EXTENSIVE GLYCOSYLATION PRECEDES THE PROTEOLYTIC CLEAVAGE (BY
CC SIMILARITY).
CC -1- SIMILARITY: Contains 1 EGF-like domain.
CC -1- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC -1- SIMILARITY: BELONGS TO THE NEUREGULIN FAMILY.
CC HSSP; Q12784; 1HRE.
DR MGD; MGI:1098246; Nrg2.
DR InterPro; IPR006209; EGF like.
DR InterPro; IPR006210; IEGF.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig C2.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR002154; Neuregulin.
DR Pfam; PF00008; EGF; 1.
DR Pfam; PF00047; Ig; 1.
DR Pfam; PF02158; Neuregulin; 1.
DR SMART; SM00181; EGF; 1.
DR SMART; SM00408; IGC2; 1.
DR PROSITE; PS00022; EGF_1; 1.
DR PROSITE; PS01186; EGF_2; 1.
DR PROSITE; PS00835; IG LIKE; 1.
DR Growth factor; EGF-like domain; Immunoglobulin domain; Glycoprotein;
DR Transmembrane; Multigene family; Alternative splicing.
FT PROPEP 1 19 BY SIMILARITY.
FT CHAIN 20 756 PRO-NEUREGULIN-2, MEMBRANE-BOUND FORM.
FT CHAIN 20 314 NEUREGULIN-2.
FT DOMAIN 20 315 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 316 336 INTERNAL SIGNAL SEQUENCE (POTENTIAL).
FT DOMAIN 337 756 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 145 240 IG-LIKE C2-TYPE.
FT DOMAIN 238 248 SER/THR-RICH.
FT DOMAIN 249 290 EGF-LIKE.
FT DOMAIN 627 633 POLY-PRO.
FT DISULFID 165 219 BY SIMILARITY.
FT DISULFID 253 267 BY SIMILARITY.
FT DISULFID 261 278 BY SIMILARITY.
FT DISULFID 280 289 BY SIMILARITY.
FT CARBOHYD 55 55 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 186 186 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 254 254 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 296 296 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT VARSPIC 280 280 C -> G (in isoform NRG2-10).
FT VARSPIC 281 756 /FTid=VSP_003460.
FT VARSPIC 282 330 Missing (in isoform NRG2-10).
FT VARSPIC 282 330 /FTid=VSP_003461.
FT VARSPIC 282 330 VGYTGRCCQGFQWVNFSEKHLGELKEELYQKRVLTITGI
FT VARSPIC 282 330 CVALLVG -> NGFPGQCLEKLPRLRTPMPKQSVLMDT
FT VARSPIC 282 330 PGTGVSSQWSTSPSTLDN (in isoform DON-1S).
FT VARSPIC 282 330 /FTid=VSP_003462.
FT VARSPIC 282 330 Missing (in isoform DON-1S).
FT VARSPIC 282 330 /FTid=VSP_003463.

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FT VARSPLIC 282 307 VGYTGRCQQFAMVNFSKHLGFELKE -> NGFFGQRCLEK
FT LPLRLYMPDPKQK (in isoform DON-1M).
FT /FTID=VSP 003464.
SQ SEQUENCE 756 AA; 82213 MW; 51D85DC318BE678E CRC64;

Query Match 11.0%; Score 156; DB 1; Length 756;
Best Local Similarity 27.7%; Pred. No. 1.7e-05;
Matches 56; Conservative 24; Mismatches 86; Indels 36; Gaps 8;

QY 44 LGRSVSFVYQOQLQGD--FKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEB 101
DB 96 LNNQRYIFLEETEQLVFKTAFAPVDN--GKNI-KKEVGKILCTDCATRPKLKKMK 152
QY 102 DVTLEVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTWFKDGIIRILENPLRGS 161
DB 153 QTGEV-----GEKQSLKCEAAGNPQPSYFWFKDGLNLR-----S 188
QY 162 QSTNSSYTNWTKGTQLQFNTVSKLDTGEYSCEARNVSVYRCGKMQVDDLNI-----S 216
DB 189 RDRIKYGNGRKNRSQFNKRVVEDAGEYVCEAEINILGKDTVRG-RLHVNVSVTTLSSWS 247
QY 217 GIIAAVVVALVISVCGLGVCY 238
DB 248 GHAKCNETAKSYCVNG-GVCY 268

RESULT 15
NCM2 HUMAN
ID NCM2 HUMAN STANDARD; PRT; 837 AA.
AC O15394;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Neural cell adhesion molecule 2 precursor (N-CAM 2).
GN NCM2 OR NCAM2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=97369930; PubMed=9226371;
RA Paoloni-Giacobino A., Chen H., Antonarakis S.E.;
RT "Cloning of a novel human neural cell adhesion molecule gene (NCAM2)
RT that maps to chromosome region 21q21 and is potentially involved in
RT Down syndrome."
RL Genomics 43:43-51(1997).
CC -!- FUNCTION: MAY PLAY IMPORTANT ROLES IN SELECTIVE FASCICULATION AND
CC ZONE-TO-ZONE PROJECTION OF THE PRIMARY OLFACTORY AXONS.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein.
CC -!- TISSUE SPECIFICITY: EXPRESSED MOST STRONGLY IN ADULT AND FETAL
CC BRAIN.
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -!- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
CC -!- SIMILARITY: Contains 2 fibronectin type III domains.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DB EMBL; U75330; AAB80803.1; -
DB Genew; HGNC:7657; NCAM2.
DB MIM; 602040; -
DB GO; GO:0016021; C:integral to membrane; TAS.
DB GO; GO:0005886; C:plasma membrane; TAS.
DB GO; GO:0007158; F:neuronal cell adhesion; TAS.
DB InterPro; IPR003961; FN.III.
DB InterPro; IPR007110; Ig-like.
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DR InterPro; IPR003598; Ig_C2.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00041; fn3; 2.
DR Pfam; PF00047; ig; 5.
DR SMART; SM00060; FN3; 2.
DR SMART; SM00408; IGC2; 5.
DR PROSITE; PS00835; IG LIKE; 5.
KW Cell adhesion; Transmembrane; Glycoprotein; Repeat;
KW Immunoglobulin domain; Signal.
FT SIGNAL 1 19 POTENTIAL.
FT CHAIN 20 837 NEURAL CELL ADHESION MOLECULE 2.
FT DOMAIN 20 697 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 698 718 POTENTIAL.
FT DOMAIN 719 837 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 21 108 IG-LIKE C2-TYPE 1.
FT DOMAIN 113 202 IG-LIKE C2-TYPE 2.
FT DOMAIN 208 297 IG-LIKE C2-TYPE 3.
FT DOMAIN 302 396 IG-LIKE C2-TYPE 4.
FT DOMAIN 401 491 IG-LIKE C2-TYPE 5.
FT DOMAIN 482 581 FIBRONECTIN TYPE-III 1.
FT DOMAIN 594 678 FIBRONECTIN TYPE-III 2.
FT DISULFID 42 93 PROBABLE.
FT DISULFID 136 186 PROBABLE.
FT DISULFID 232 281 PROBABLE.
FT DISULFID 322 380 PROBABLE.
FT DISULFID 422 475 PROBABLE.
FT CARBOHYD 177 217 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 219 249 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 309 309 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 406 406 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 419 419 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 445 445 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 474 474 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 562 562 N-LINKED (GLCNAC. .) (POTENTIAL).
SQ SEQUENCE 837 AA; 92932 MW; C3D034106C5741C1 CRC64;

Query Match 11.0%; Score 155.5; DB 1; Length 837;
Best Local Similarity 26.6%; Pred. No. 1.7e-05;
Matches 41; Conservative 30; Mismatches 72; Indels 11; Gaps 4;

QY 47 SVSFVYQOQLQGDFFKNRAEMI-DFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDT 105
DB 145 AVSWLYHNEEVTISDNRLANLNNLQILNINKSDEGIYRCGEVGEARGEIDFRDIIV 204
QY 106 LEVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTWFKDGIIRILENPLRGSQSTN 165
DB 205 VNVPPAISMPQKSFNATAERGEEMTFSCR-ASGSPEPAISWFRNG-KLIEE-----N 254
QY 166 SSYTNTTKTGTQLQFNTVSKLDTGEYSCEARNVSVG 199
DB 255 EKVILKSGNTELTVRNIINSDGPPVCRATNKAG 288
```

Search completed: December 9, 2003, 17:11:46
Job time : 10.1359 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 9, 2003, 17:08:46 ; Search time 29.8118 Seconds
(without alignments)
2389.068 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 1418

Sequence: 1 YHKYGFSAKQVQVTVAVX.....SSKATMTSEDPKTKTSFII 276

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 830525 seqs, 258052604 residues

Total number of hits satisfying chosen parameters: 830525

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SPTREMBL_23.*

1: sp_archaea.*
2: sp_bacteria.*
3: sp_fungi.*
4: sp_human.*
5: sp_invertebrate.*
6: sp_mammal.*
7: sp_mhc.*
8: sp_organelle.*
9: sp_plant.*
10: sp_phage.*
11: sp_ricent.*
12: sp_virus.*
13: sp_vertebrate.*
14: sp_unclassified.*
15: sp_rvirus.*
16: sp_bacteriap.*
17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1159	81.7	298	11 Q9J159	Q9J159 mus musculus
2	1156	81.5	298	11 Q8CE95	Q8CE95 mus musculus
3	1156	81.5	298	11 Q8C5K9	Q8C5K9 mus musculus
4	487.5	34.4	310	11 Q9EPK4	Q9EPK4 mus musculus
5	486.5	34.3	310	11 Q9DBB7	Q9DBB7 mus musculus
6	484.5	34.2	310	11 Q9D1M9	Q9D1M9 mus musculus
7	477.5	33.7	309	4 Q96FL1	Q96FL1 homo sapien
8	477.5	33.7	310	4 Q9BXE7	Q9BXE7 homo sapien
9	477.5	33.7	355	4 Q8MWL8	Q8MWL8 homo sapien
10	451.5	31.8	181	11 Q9CWD9	Q9CWD9 mus musculus
11	410	28.9	300	11 Q8VC39	Q8VC39 mus musculus
12	409.5	28.9	300	11 Q9JHY1	Q9JHY1 rattus norv
13	393.5	27.8	259	4 Q9Y5B2	Q9Y5B2 homo sapien
14	315.5	22.2	173	11 Q9JKD5	Q9JKD5 rattus norv
15	225	15.9	335	13 Q9PWR4	Q9PWR4 gallus gall
16	224	15.8	318	13 Q91664	Q91664 xenopus lae

ALIGNMENTS

RESULT 1

Q9J159
ID Q9J159 PRELIMINARY; PRT; 298 AA.
AC Q9J159;
DT 01-OCT-2000 (TRENBLrel. 15, Created)
DT 01-OCT-2000 (TRENBLrel. 15, Last sequence update)
DT 01-MAR-2003 (TRENBLrel. 23, Last annotation update)
DE Vascular endothelial junction-associated molecule (Junctional adhesion molecule-3) (2410030G21Rik protein).
GN JCAM3 OR JCAM2 OR JAM-3 OR 2410030G21RIK.
OS Mus musculus (Mouse)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.-C., Hemmerich S., Rosen S.D.;
RT "Vascular Endothelial Junction-associated Molecule, a Novel Member of the Immunoglobulin Superfamily, Is Localized to Intercellular Boundaries of Endothelial Cells."
RL J. Biol. Chem. 275:19139-19145(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC MEDLINE=11036763; PubMed=11036763;
RX Aurand-Lions M.A., Duncan L., Du Pasquier L., Imhof B.A.;
RT "Cloning of JAM-2 and JAM-3: an Emerging Junctional Adhesion Molecular Family?"
RL Curr. Top. Microbiol. Immunol. 251:91-98(2000).
RN [3]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Embryo, and Embryonic stem cells;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamana I., Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R., Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,

17 224 15.8 335 13 Q9YGH1
18 221 15.6 319 11 Q922D5
19 219 15.4 319 11 Q9TKA5
20 219 15.4 335 13 Q9YGV5
21 217 15.3 181 13 Q91665
22 210 14.8 259 4 Q95532
23 198 14.0 390 4 Q96T50
24 198 14.0 390 4 Q96AP7
25 197 13.9 407 11 Q9D2J4
26 196 13.8 394 11 Q925F2
27 195 13.8 390 6 Q95K13
28 194.5 13.7 319 6 Q9TU80
29 194 13.4 372 13 Q90Y50
30 190.5 13.4 344 4 Q9UKV4
31 190.5 13.4 365 6 Q8MMV3
32 188 13.3 430 4 Q8N4F1
33 186 13.1 773 5 Q8IRSS
34 183 12.9 300 11 Q9DA22
35 183 12.9 300 11 Q9D9J0
36 181 12.8 319 6 Q9TU79
37 180 12.7 352 11 Q91W66
38 180 12.7 365 11 Q9DBJ8
39 179.5 12.7 304 11 Q9CVA4
40 179.5 12.7 323 4 Q8NDD2
41 177 12.5 284 4 Q9NX42
42 177 12.5 325 4 Q95791
43 177 12.5 327 4 Q96IQ7
44 175.5 12.4 328 11 Q92109
45 174 12.3 344 11 Q9R067

Q9YGH1 gallus gall
Q922D5 mus musculus
Q9TKA5 mus musculus
Q9YGV5 gallus gall
Q91665 xenopus lae
Q95532 homo sapien
Q96T50 homo sapien
Q96AP7 homo sapien
Q9D2J4 mus musculus
Q925F2 mus musculus
Q95K13 macaca fasc
Q9TU80 canis famil
Q90Y50 brachydanio
Q9UKV4 homo sapien
Q8MMV3 bos taurus
Q8N4F1 homo sapien
Q8IRSS drosophila
Q9DA22 mus musculus
Q9D9J0 mus musculus
Q9TU79 sus scrofa
Q91W66 mus musculus
Q9DBJ8 mus musculus
Q9CVA4 mus musculus
Q8NDD2 homo sapien
Q9NX42 homo sapien
Q95791 homo sapien
Q96IQ7 homo sapien
Q92109 mus musculus
Q9R067 rattus norv

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RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaide I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Maehima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayaishizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AF255911; AAF81224.1; -.
DR EMBL; AJ291757; CAB20699.1; -.
DR EMBL; AK013914; BAB29053.1; -.
DR EMBL; AK010616; BAB27064.1; -.
DR MGD; MGI:1933820; Jcam2.
DR MGD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR Pfam; PF00047; Ig; 2.
DR PROSITE; PS00835; IG_LIKE; 2.
SQ SEQUENCE 298 AA; 33047 MW; 1124E0F07E6CF751 CRC64;

Query Match 81.7%; Score 1159; DB 11; Length 298;
Best Local Similarity 80.1%; Pred. No. 6.5e-100;
Matches 222; Conservative 22; Mismatches 31; Indels 2; Gaps 2;

QY 1 YHKAYGFSAPKD-QQVTVAVXYQEAAILACKTPKKTVXSRLEWKKLGRSVSFVYQQTLOG 59
DB 23 YHKANGFSASKDHQREVTVIEFQEAAILACKTPKKTSSRLEWKKVGGVSLVYQQALOG 82

QY 60 DFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTTLVLVAPVPSCEV 119
DB 83 DFKDRAEMIDFNIRIKNVTRSDAGEYRCEVSAPTEQONLQEDKVMLEVLVAPVAPACEV 142

QY 120 PSSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSGSTNSSTYMTKTGTLOF 179
DB 143 PTVMTGSGVVELRCQDKEGNPAPEYTWFKDGTSLGNPK-GGTHNNSSTYMTKSGILOF 201

QY 180 NTVSKLDTGEYSCEARNVGYRRCPCGRMQRVDDNLISGIIAAVVALVISVCGLGVCYA 239
DB 202 NMISKWDSGEYCEARNVGHRRCPGRMQRVDDNLISGIIATVVVAVFVISVCGLGTCYA 261

QY 240 QRKGYSKETSFOKSNSSSKATMTSENDFKHTKSFII 276
DB 262 QRKGYSKETSFOKSGPASKVTMTSENDFKHTKSFII 298

RESULT 2
QSC95
ID Q8CE95 PRELIMINARY; PRT; 298 AA.
AC Q8CE95;
DT 01-MAR-2003 (TRENBLrel. 23, Created)
DT 01-MAR-2003 (TRENBLrel. 23, Last sequence update)
DE Junction cell adhesion molecule 2.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Medulla oblongata;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium,
RA The RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of
RL Nature 420:563-573(2002).
DR EMBL; AK078128; BAC37139.1; -.
SQ SEQUENCE 298 AA; 33182 MW; 1131F0BFD99CEB51 CRC64;

Query Match 81.5%; Score 1156; DB 11; Length 298;
Best Local Similarity 80.1%; Pred. No. 1.2e-99;
Matches 222; Conservative 22; Mismatches 31; Indels 2; Gaps 2;

QY 1 YHKAYGFSAPKD-QQVTVAVXYQEAAILACKTPKKTVXSRLEWKKLGRSVSFVYQQTLOG 59
DB 23 YHKANGFSASKDHQREVTVIEFQEAAILACKTPKKTSSRLEWKKVGGVSLVYQQALOG 82

QY 60 DFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTTLVLVAPVPSCEV 119
DB 83 DFKDRAEMIDFNIRIKNVTRSDAGEYRCEVSAPTEQONLQEDKVMLEVLVAPVAPACEV 142

QY 120 PSSALSGTVVELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGSGSTNSSTYMTKTGTLOF 179
DB 143 PTVMTGSGVVELRCQDKEGNPAPEYTWFKDGTSLGNPK-GGTHNNSSTYMTKSGILOF 201

QY 180 NTVSKLDTGEYSCEARNVGYRRCPCGRMQRVDDNLISGIIAAVVALVISVCGLGVCYA 239
DB 202 NMISKWDSGEYCEARNVGHRRCPGRMQRVDDNLISGIIATVVVAVFVISVCGLGTCYA 261

QY 240 QRKGYSKETSFOKSNSSSKATMTSENDFKHTKSFII 276

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Db 262 ORKGYFSKETSFQKGSPASKVTTWSENDFKHKTSFII 298
||||| : : |||||
RESULT 4

O9EPK4 PRELIMINARY; PRT; 310 AA.
AC O9EPK4
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT 01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DE Functional adhesion molecule-2, JAM-2 (1110002N23Rik protein)
DE (Junction cell adhesion molecule 3)
GN JCAM3 OR JCAM2 OR JAM-2 OR 1110002N23RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=11036763;
RA Aurand-Lions M.A., Duncan L., Du Pasquier L., Imhof B.A.;
RA "Cloning of JAM-2 and JAM-3: an Emerging Junctional Adhesion Molecular Family?";
RT Curr. Top. Microbiol. Immunol. 251:91-98(2000).
RL [2]
RN SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Embryo;
RC MEDLINE=21085660; PubMed=11217851;
RX Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaoka I., Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R., Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H., Fleishmann L.M., Straubli F., Suzuki R., Tomita M., Wagner L., Washio T., Sakai K., Ohido T., Furuno M., Aono H., Baldarelli R., Barsh G., Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F., Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Sakamoto N., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-P., Wynshaw-Boris A., Wang K.H., Weitz C., Whittaker C., Wilming L., Hayaashizaki Y.;
RA "Functional annotation of a full-length mouse cDNA collection.";
RA Nature 409:685-690(2001).
RL [3]
RN SEQUENCE FROM N.A.
RC STRAIN=Kidney;
RC Straussberg R.;
RN Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
RL [4]
RN SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Mesonephros;
RC MEDLINE=22354683; PubMed=12466851;
RX The FANTOM Consortium,
RA the RIKEN Genome Exploration Research Group Phase I & II Team;
RT "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs";
RT Nature 420:563-573(2002).
RL EMBL; AJ300304; CAC20704.1; -
DR EMBL; AK013156; BAB28683.1; -
DR EMBL; BC024357; AAH24357.1; -
DR EMBL; AK032833; BAC28049.1; -
DR MGD; MGI:1933820; Jcam2.
DR MGD; MGI:1933825; Jcam3.
DR InterPro; IPRO07110; IG-like.
DR InterPro; IPRO03598; Ig_c2.
DR InterPro; IPRO03006; Ig_MHC.
DR Pfam; PF00047; ig; 2.

SMART, SM00408; IGC2; 1.
PROSITE; PS00835; IG LIKE; 2.
KW Immunoglobulin domain.
SQ SEQUENCE 310 AA; 34837 MW; 4B92BCB51D0A4B0A CRC64;

Query Match 34.4%; Score 487.5; DB 11; Length 310;
Best Local Similarity 39.1%; Pred. No. 3.3e-37;
Matches 104; Conservative 55; Mismatches 96; Indels 11; Gaps 6

Oy 21 YOBAIILAC-KTPKKTKYKSLEWKU-GRSVSPVYYQQTLQGDFKNRAEMI-DFNIRIKNV 77
Db 46 FESVELSCIITDSQSDPRIEWKKIQDGQTIVFDNKIOGLAGRTDVFKTSLURINWV 105
Oy 78 TRSDACKYRCVSAPSEOGQNLEEDVTLEVLPAVPFSCVEPVSSALSGTVTVELRCQDK 137
Db 106 TRSDSAIYCEVVVALNDR-KEVDIEITIELIVQVKPTPCVIPAAVPGVKATLQCQSE 164
Oy 138 GNPAPEYTFWKGIRILENPRLGQSSTNSSTMNTKTGTQLQNTVSKLDTEGYSCEARN 197
Db 165 GYPRPHYSWRNDVPLPTDSRANPRFQNSSEHFVNSETGTGVFNVAHKDDSGQYICIASND 224
Oy 198 VGYRRCPGKRMOVDLLNISGIAAVVVALVLSVCLGVCAQRKYGF--SKE-----TS 250
Db 225 AGAARCEGQMEVDNLTAIGLVLIIVLAIVTMGICAYRRGCCFISSKDGEYSYKS 284
Oy 251 FOKSNSSSKATTMSSENDPKHTKSFII 276
Db 285 PGKHDGVNVRTSEGGFRHKSSFVI 310

RESULT 5
O9D8B7 PRELIMINARY; PRT; 310 AA.
ID O9D8B7
AC O9D8B7
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DE 1110002N23Rik protein.
GN JCAM3 OR JCAM2 OR 1110002N23RIK.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Small intestine;
RC MEDLINE=21085660; PubMed=11217851;
RX Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y., Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S., Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaoka I., Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R., Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H., Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J., Schriml L.M., Stauber F., Suzuki R., Tomita M., Wagner L., Washio T., Sakai K., Ohido T., Furuno M., Aono H., Baldarelli R., Barsh G., Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F., Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M., Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H., Lyons P., Marchionni L., Mashima J., Mazzarelli J., Sakamoto N., Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N., Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-P., Wynshaw-Boris A., Wang K.H., Weitz C., Whittaker C., Wilming L., Hayaashizaki Y.;
RA "Functional annotation of a full-length mouse cDNA collection.";
RA Nature 409:685-690(2001).
RL [3]
RN SEQUENCE FROM N.A.
RC STRAIN=Kidney;
RC Straussberg R.;
RN Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
RL [4]

[illegible]

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DR Pfam: PF00047; ig; 2.
DR SMART: SM00408; Igc2; 1.
DR PROSITE: PS0835; IG_LIKE; 2.
KW Immunoglobulin domain.
SQ SEQUENCE 310 AA; 34855 MW; C74884EABE234680 CRC64;

Query Match      34.3%; Score 486.5; DB 11; Length 310;
Best Local Similarity 39.1%; Pred. No. 4.1e-37;
Matches 104; Conservative 54; Mismatches 97; Indels 11; Gaps 6;

QY 21 YQAILAC-KTPKKTVXSRLEWKKL-GRSVSFVYQQTLOGDPKNAEMI-DFNIRIKNV 77
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db 46 FESVELSCIITDSQSDPRIEMKKIQDQGTYYVFNKIQGLAGRTDVFGKTSLRINWV 105
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
QY 78 TRSDAGKYRCEVSAPEEQGNLEEDTVTLVLVAPVAPVCEVPSSALSCTVVELRCODKE 137
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db 106 TRSDSAIYRCEVVALNDR-KEVDEITIELIVQKPTVPCRIIPAAVPVKGATLQCOESE 164
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
QY 138 GNPAPETWFKDGIIRLLENPRLGQSQTNSSTYMTKTGTLOFNTVSKLDTGEYSCEARN 197
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db 165 GYPRPHYNRYNDVPLPTDSRANPRFQNSSFHVNSETGLVFNVAHKDSDGQYCIASND 224
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
QY 198 VGYRCPGKRMQVDDLNISGIIAAVVVALVSVCGLVGYCAQRKGYF--SKE-----TS 250
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db 225 AGAARCEQDMEDYDNLNAGIIGGLVLVLVAVITMGICCAVRRGCFISSKQDGESYKS 284
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
QY 251 FOKNSSSKATMTSENDFKHTKSFII 276
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|
Db 285 PGKHGDNVYRTSEGDPRHKSFSVI 310
   :::::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|:::|

RESULT 6
Q9D1M9 PRELIMINARY; PRT; 310 AA.
ID Q9D1M9
AC Q9D1M9
DT 01-JUN-2001 (TrEMBLrel. 17, Created)
DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE 1110002N23Rik protein.
GN JCAM3 OR JCAM2 OR 1110002N23RIK.
OS Mus musculus (Mouse)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Embryo;
RX MEDLINE=21085860; PubMed=11217851;
RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleisemann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli P., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wyshah-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
DR EMBL; AK003326; BAB22715.1; -.
DR MGD; MGI:1933820; Jcam2.
DR MGD; MGI:1933825; Jcam3.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003598; Ig_C2.

```

Db 164 GHPHYSWYRNDVPLPTDSRANPRFNSFHLNSETGLVFTAVHKDDSGQYYCIAASND 223
QY 198 VGYRRCPGKRMQVDDNLNIGIIAAVVVALVISVCGLVGYCAQRKGYF--SKE--TSFQ- 252
Db 224 AGSARCEQEEMEVVDNLNIGIIGGVVLVAVLALITLIGICCAVRRGYFINNKODGESYKN 283
QY 253 --KSNSSKATTMSNDPKHTKSFII 276
Db 284 PGKPDGVNYIRTDEGDFRHKSFVI 309

RESULT 8

Q9BX67
ID Q9BX67 PRELIMINARY; PRT; 310 AA.
AC Q9BX67;
DT 01-JUN-2001 (T-EMBLrel. 17, Created)
DT 01-JUN-2001 (T-EMBLrel. 17, Last sequence update)
DT 01-MAR-2003 (T-EMBLrel. 23, Last annotation update)
DE Junctional adhesion molecule 3 precursor (Junctional adhesion molecule-2) (Junctional adhesion molecule-3) (Hypothetical protein FLJ90288) (Hypothetical protein FLJ90828).
DE GN JAM-2 OR JAM3
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP TISSUE=Brain;
RC CUNNINGHAM S.A., ARRATTE M.P., TRAN T.M.;
RA CUNNINGHAM S.A., ARRATTE M.P., TRAN T.M.;
RT "Cloning of Human Junctional Adhesion Molecule 3."
RL Submitted (MAR-2001) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA Aurrand-Lions M.A., Johnson-leger C., Wong C., DuPasquier L.;
RT "Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members."
RL Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.
RN [3]
RP SEQUENCE FROM N.A.
RA Aurrand-Lions M.A., Johnson-leger C., Lamagna C., Ozaki H., Kita T.;
RT "Junctional adhesion molecules (JAMs) and interendothelial junctions."
RL Submitted (AUG-2001) to the EMBL/GenBank/DBJ databases.
RN [4]
RP SEQUENCE FROM N.A.
RA SACHS U.J.H., EVA O., BERGHOEFER H., SANTOSO S.;
RT "Characterization of Junctional Adhesion Molecule-3 on Human Platelets: A New Member of Immunoglobulin Superfamily."
RL Submitted (NOV-2001) to the EMBL/GenBank/DBJ databases.
RN [5]
RP SEQUENCE FROM N.A.
RA ISOGAI T., OTA T., NISHIKAWA T., HAYASHI K., OTSUKI T., SUGIYAMA T., SUZUKI Y., NAGAI K., SUGANO S., ISHII S., KAWAI-HIO Y., SAITO K., YANAMOTO J., WAKAMATSU A., NAKAMURA Y., KOJIMA S., NAGAHARI K., MASUHO Y., ONO T., OKANO K., YOSHIKAWA Y., AOTSUKA S., SAAKI N., HATTORI A., OKUMURA K., IWAYANAGI T., NINOMIYA K.;
RT "NEDO human cDNA sequencing project."
RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF356518; AAK27221.1; -
DR EMBL; AJ344431; CAC69845.1; -
DR EMBL; AF448478; AAM20925.1; -
DR EMBL; AK074769; BAC11195.1; -
DR EMBL; AK075309; BAC11538.1; -
DR InterPro; IPR007110; IG-like.
DR Pfam; PF00047; Ig_2.
DR PROSITE; PS50835; IG_LIKE; 2.
KW Immunoglobulin domain.
FT CHAIN 76 355
SQ SEQUENCE 310 AA; 35020 MW; CE39ADF33EADAB9 CRC64;

Query Match 33.7%; Score 477.5; DB 4; Length 310;
Best Local Similarity 38.0%; Pred. No. 2.8e-36;
Matches 101; Conservative 57; Mismatches 97; Indels 11; Gaps 7;
QY 21 YQEAAILAC-KTPPKTVKSRLEWKKL-GRSVSVFYVYQOTLQGFKNRAEMI-DFNIRIKNV 77
Db 46 FESVELSCIITDSQTSDPRIEWKKIQDEQTYVFDNKKIQGDLAGRAEILGKTSLKINWV 105
QY 78 TRSDAGKYRCEVSAPSEQQONLEEDTVTLVAVAPVPSCEVPSSALSGTVVLRCDCKE 137
Db 106 TRRDSALYRCEVVARNDR-KEIDEIVIELTVQVKPTVPCRVKAVPVGKMATLHCQESE 164
QY 138 GNPAPETWFKDGIIRLENPRLGSSQSTNSYTNKTKTGLQFNVTYVKLDTGEYSCARN 197
Db 165 GHPHYSWYRNDVPLPTDSRANPRFNSFHLNSETGLVFTAVHKDDSGQYYCIAASND 224
QY 198 VGYRRCPGKRMQVDDNLNIGIIAAVVVALVISVCGLVGYCAQRKGYF--SKE--TSFQ- 252
Db 225 AGSARCEQEEMEVVDNLNIGIIGGVVLVAVLALITLIGICCAVRRGYFINNKODGESYKN 284
QY 253 --KSNSSKATTMSNDPKHTKSFII 276
Db 285 PGKPDGVNYIRTDEGDFRHKSFVI 310

RESULT 9

Q8WML8
ID Q8WML8 PRELIMINARY; PRT; 355 AA.
AC Q8WML8;
DT 01-MAR-2002 (T-EMBLrel. 20, Created)
DT 01-MAR-2002 (T-EMBLrel. 20, Last sequence update)
DT 01-MAR-2003 (T-EMBLrel. 23, Last annotation update)
DE Junction adhesion molecule 3.
DE JAM3.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA HEARN T.;
RL Submitted (OCT-2001) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA PHILLIPS H.M.;
RT "Narrowing the critical region within 11q24-qter for hypoplastic left heart and identification of a candidate gene, JAM3, expressed during cardiogenesis."
RL Submitted (FEB-2002) to the EMBL/GenBank/DBJ databases.
DR EMBL; AJ416101; CAC94776.1; -
DR Genew; HGNC:15532; JAM3.
DR InterPro; IPR007110; IG-like.
DR InterPro; IPR003598; IG_c2.
DR InterPro; IPR003006; IG_MHC.
DR Pfam; PF00047; Ig_2.
DR SMART; SM00408; IgC2; 1.
DR PROSITE; PS50835; IG_LIKE; 2.
KW Immunoglobulin domain.
FT CHAIN 76 355
SQ SEQUENCE 355 AA; 39602 MW; 8B1577DEA7BD4F8 CRC64;

Query Match 33.7%; Score 477.5; DB 4; Length 355;
Best Local Similarity 38.0%; Pred. No. 3.4e-36;
Matches 101; Conservative 57; Mismatches 97; Indels 11; Gaps 7;
QY 21 YQEAAILAC-KTPPKTVKSRLEWKKL-GRSVSVFYVYQOTLQGFKNRAEMI-DFNIRIKNV 77
Db 91 FESVELSCIITDSQTSDPRIEWKKIQDEQTYVFDNKKIQGDLAGRAEILGKTSLKINWV 150
QY 78 TRSDAGKYRCEVSAPSEQQONLEEDTVTLVAVAPVPSCEVPSSALSGTVVLRCDCKE 137
Db 151 TRRDSALYRCEVVARNDR-KEIDEIVIELTVQVKPTVPCRVKAVPVGKMATLHCQESE 209

QY 138 GNPAPETWFKDGIIRLENPRLSQSTNSSTMTNTKTGLQNTVTSKLDTGYSCEARN 197
 Db 210 GHPRPHYSWYRNDVPLPTDSRANFRNSSPHLSEIGTLVFTAVHKDDSGQYCIASND 269
 QY 198 VGYRCPCKRMQVDDNIGSIIIAVVALVSVGLGVCAQKGYF--SKE--TSFQ- 252
 Db 270 AGSARCEQEMEVDNLNIGGIIGVGLVLAVALITLIGICCAVRGYPINNKQDGESYKN 329
 QY 253 --KSNSSSKATTMSNDPKHTKSFII 276
 Db 330 PKRPGDGVNYIRTDEGDFRHKSSFVI 355

RESULT 10

Q9CWD9 PRELIMINARY; PRT; 181 AA.
 AC Q9CWD9;
 DT 01-JUN-2001 (TrEMBLrel. 17, Created)
 DT 01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
 DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
 DE 2410167M24Rik protein (Junction cell adhesion molecule 2).
 GN JCAM2 OR 2410167M24RIK.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Embryonic stem cells;
 RX MEDLINE=21085660; PubMed=11217851;
 RA Kawai J., Shingawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
 Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
 Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
 Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
 Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
 Fleischmann W., Gaasterland T., Giesi C., King B., Kochiwa H.,
 Kuehl P., Lewis S., Matsuo Y., Nikaide I., Pesole G., Quackenbush J.,
 Schriml L.M., Staudl F., Suzuki R., Tomita M., Wagner L., Washio T.,
 Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
 Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
 Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
 Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
 Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
 Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
 Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
 Suzuki H., Toyooka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
 Wyshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
 Hayashizaki Y.;
 RT "Functional annotation of a full-length mouse cDNA collection."
 RL Nature 409:685-690(2001).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J;
 RX MEDLINE=22354683; PubMed=12466851;
 RA The FANTOM Consortium,
 RT "Analysis of the mouse transcriptome based on functional annotation of
 60,770 full-length cDNAs."
 RL Nature 420:563-573(2002).
 DR EMBL; AK010826; BAB27208.1; -;
 DR EMBL; AK045095; BAC32219.1; -;
 DR MGD; MGI:1933820; Jcam2.
 DR InterPro; IPR003599; Ig.
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003006; Ig_MHC.
 DR Pfam; PF00047; Ig_1.
 DR SMART; SM00409; Ig_1.
 DR PROSITE; PS0835; IG LIKE; 1.
 SQ SEQUENCE 181 AA; 20330 MW; 603B6114FEB11AEB CRC64;

Query Match 31.8%; Score 451.5; DB 11; Length 181;
 Best Local Similarity 80.0%; Pred. No. 3.6e-34;
 Matches 99; Conservative 49; Mismatches 116; Indels 12; Gaps 6;
 QY 7 FSAPKDDQVTVAVYQEAAILACKTPKTVSRLEWKKL-GRSVFVYQOTLQGFKNRA 65
 Db 31 YTAQSDVQVPE---NESIKLTCTYSGFSPRVEKFKVQSGTALVCYNSQITAPYADV 86
 QY 66 EMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLLEDVTVLEVLVAPVPSCEVPSSALS 125
 Db 87 TFSGGITFSSVTRKDNCEYTCWS--EEGGNYGEVSIHLTVLPSPKPTISVPSVVTI 144
 QY 126 GTTVELRCQDKGNPAPETWFKDGIIRLENPRLSQS--TNSSTMTNTKTGLQNTVTSK 184
 Db 145 GNRVLVTCSEHDGSPPSSEYFWKDGISMLTADAKKTRAPMNSSFTIDPKSGDLIDPVT 204
 QY 185 LDTGEYSCEARNVSG-YRRCFCKRMQVDDNIGSIIIAVVALVSVGLGVCAQKRG 243
 Db 205 FDSGEYVCAQNGYGTAMRSEAAHMDAVELNVGGIVAAVLVTLILLGLLIFGVWFAYS 264
 QY 244 YF---SKETSFKNSGSKATTMTSENDPKHTKSFII 276
 Db 265 YFETKKGTAPEKVKVIYQSPSTRSEGEFKQTSSFLV 300

Matches 88; Conservative 9; Mismatches 12; Indels 1; Gaps 1;
 QY 1 YHKAYGESAPKD-QQVTVAVYQEAAILACKTPKTVSRLEWKKLGRSVFVYQOTLQ 59
 Db 23 YHKANGESASDKHQEVTVIEFQEAAILACKTPKTVSRLEWKKVGGVSLVYVQALQ 82
 QY 60 DFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLLEDVTVLEVL 109
 Db 83 DFKDRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLLEDVTVLEVL 132

RESULT 11

Q8VC39 PRELIMINARY; PRT; 300 AA.
 AC Q8VC39;
 DT 01-MAR-2002 (TrEMBLrel. 20, Created)
 DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
 DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
 DE Hypothetical protein (Junction cell adhesion molecule1).
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OX NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Breast tumor;
 RA Strausberg R.;
 RL Submitted (JAN-2002) to the EMBL/GenBank/DBJ databases.
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Cecum;
 RX MEDLINE=22354683; PubMed=12466851;
 RA The FANTOM Consortium,
 RT "Analysis of the mouse transcriptome based on functional annotation of
 60,770 full-length cDNAs."
 RL Nature 420:563-573(2002).
 DR EMBL; BC021876; AAH21876.1; -;
 DR EMBL; AK033574; BAC28369.1; -;
 DR InterPro; IPR007110; Ig-like.
 DR InterPro; IPR003006; Ig_MHC.
 DR InterPro; IPR003599; Ig_v.
 DR Pfam; PF00047; Ig_2.
 DR SMART; SM00406; IgV; 1.
 DR PROSITE; PS0835; IG LIKE; 2.
 KW Hypothetical protein.
 SQ SEQUENCE 300 AA; 32423 MW; 3CB561E8FF3B97EC CRC64;

Query Match 28.9%; Score 410; DB 11; Length 300;
 Best Local Similarity 35.9%; Pred. No. 5.4e-30;
 Matches 99; Conservative 49; Mismatches 116; Indels 12; Gaps 6;
 QY 7 FSAPKDDQVTVAVYQEAAILACKTPKTVSRLEWKKL-GRSVFVYQOTLQGFKNRA 65
 Db 31 YTAQSDVQVPE---NESIKLTCTYSGFSPRVEKFKVQSGTALVCYNSQITAPYADV 86
 QY 66 EMIDFNIRIKNVTSDAGKYRCEVSAPSEQQNLLEDVTVLEVLVAPVPSCEVPSSALS 125
 Db 87 TFSGGITFSSVTRKDNCEYTCWS--EEGGNYGEVSIHLTVLPSPKPTISVPSVVTI 144
 QY 126 GTTVELRCQDKGNPAPETWFKDGIIRLENPRLSQS--TNSSTMTNTKTGLQNTVTSK 184
 Db 145 GNRVLVTCSEHDGSPPSSEYFWKDGISMLTADAKKTRAPMNSSFTIDPKSGDLIDPVT 204
 QY 185 LDTGEYSCEARNVSG-YRRCFCKRMQVDDNIGSIIIAVVALVSVGLGVCAQKRG 243
 Db 205 FDSGEYVCAQNGYGTAMRSEAAHMDAVELNVGGIVAAVLVTLILLGLLIFGVWFAYS 264
 QY 244 YF---SKETSFKNSGSKATTMTSENDPKHTKSFII 276
 Db 265 YFETKKGTAPEKVKVIYQSPSTRSEGEFKQTSSFLV 300

[illegible]

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RESULT 15
Q9PWR4 PRELIMINARY; PRT; 335 AA.
ID Q9PWR4;
AC Q9PWR4;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DE CH11 thymocyte antigen precursor.
GN CH11.
OS Gallus gallus (Chicken).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Archoaurea; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC Gallus.
OX NCBI_TaxID=9031;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=H.B19; TISSUE=Thymus;
RA Katelyn K.H., Boyd R., Gobel T.T., Bean A., Dunon D., Imhof B.A.,
RA Vainio O.;
RT "CH11, a new IgSF member inhibits thymocyte differentiation at the
RT double positive stage.";
RL Submitted (JUN-1997) to the EMBL/GenBank/DBJ databases.
DR EMBL; Y14064; CAA74391.1; -.
DR HSP; P06907; 1NEU.
DR InterPro; IPR007110; Ig-like.
DR InterPro; IPR003006; Ig_MHC.
DR InterPro; IPR003596; Ig_V.
DR Pfam; PF00047; Ig; 2.
DR SMART; SM00406; IGV; 1.
DR PROSITE; PS0835; IG_LIKE; 2.
KW Signal.
FT SIGNAL.
FT CHAIN.
SQ SEQUENCE 335 AA; 36509 MW; AA6159598079B438 CRC64;

Query Match 15.9%; Score 225; DB 13; Length 335;
Best Local Similarity 24.1%; Pred. No. 1.2e-12;
Matches 75; Conservative 45; Mismatches 101; Indels 90; Gaps 10;

QY 5 YGSAPKQQQVTVAYXQEBAILACKTPKTVKSLRWKKLGRSVFVYQOTLGGDFNRR 64
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :
58 WSPYSAKESQLHTIYYISE-----GQSYSY-----GEFKDR 88

QY 65 AEMI-----DFNIRIKNVTSDAGKYRCVSAPEQ--GONLEEDVTTLVLVAPVPSCV 119
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :
89 ITAATSPGNASIIISNQPSDTSYTCVFPQDAGQS--QKSVIWNVLVKSPKPFCKI 146
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 120 PSSALGCTGVVELRCQDKEGNPAPETWFGDIRLLENFRLGSOSTNSSYTMTKTGLQF 179
DB 147 EGTPEKGHLIYLLCKDGLPHPTRYKVKDENTL-----TPVTEYFNPDITGLYI 197
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 180 NTVSKLDTGEYSCEARNSVGYRCPCGKMQVD-----DLNI--SGIIAAVVVALVISV 231
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :
198 GNUTTFETGTHYRCIASIMNGSTC-----ELDITSMHSDGNI VAGALIGALAAVITCAI 252
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 232 CGLGVCVYQAKRGYFSKE-----TSFQKSNSSSK 259
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :
253 VWVLTKKAKKKSSNEMQVMAQKQSNAEYAQVPEENTPATAVLPNSNATNEQPSADEAA 312
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 260 ATTMSENDFGH 270
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :
313 APETPENDEKH 323
DB : : : : : : : : : : : : : : : : : : : : : : : : : : : :

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Search completed: December 9, 2003, 17:13:00
Job time : 29.8118 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:26:03 ; Search time 41.3519 Seconds
(without alignments)
1059.408 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 YHKAYGSPAKQOVTVAVX.....SSKATTMSNDFKHTKSFII 276

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1107863 seqs, 158726573 residues

Word size: 30

Total number of hits satisfying chosen parameters: 40

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : A_Geneseq 19Jun03.*

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1: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1980.DAT.*
2: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1981.DAT.*
3: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA1982.DAT.*
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21: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2000.DAT.*
22: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2001.DAT.*
23: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2002.DAT.*
24: /SIDS1/gcgdata/geneseq/geneseq-emb1/AA2003.DAT.*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	274	99.3	298	19	AAW75220 Human secreted pro
2	274	99.3	298	23	AAE26983 Human gene 25 enco
3	274	99.3	298	23	AAE27121 Human gene 25 enco
4	274	99.3	298	24	ABR47526 Human secreted pro
5	274	99.3	298	24	ABU64594 Human secreted pro
6	274	99.3	298	24	ABR00172 Human gene 162 enc
7	240	87.0	298	19	AAW85457 Secreted protein a
8	240	87.0	298	22	AAU00512 Human junctional a
9	240	87.0	298	23	ABP61801 Human polypeptide

10	240	87.0	298	24	AAO16452 Human junctional a
11	230	83.3	312	20	AAV08060 Human PRO245 prote
12	230	83.3	312	20	AAV23324 A33 related anige
13	230	83.3	312	20	AAV13354 Amino acid sequenc
14	230	83.3	312	21	AAV33421 Human PRO245 prote
15	230	83.3	312	21	AAV24401 Human PRO245 prote
16	230	83.3	312	21	AAV70668 Human PRO245 prote
17	230	83.3	312	22	AAU12339 Human PRO245 polyp
18	230	83.3	312	22	AAU00821 Human immune respo
19	230	83.3	312	22	AAV80222 Human PRO245 prote
20	230	83.3	312	22	AAV50904 Human PRO245 prote
21	230	83.3	312	22	AAV53081 Human angiogenesis
22	230	83.3	312	24	AAV69632 Novel human secret
23	230	83.3	312	24	ABU71455 Human PRO polypept
24	230	83.3	312	24	ABU71901 Human secreted/tra
25	230	83.3	312	24	ABU07738 Human A-33 related
26	230	83.3	312	24	ABU66737 Human PRO polypept
27	230	83.3	312	24	ABU67013 Human secreted/tra
28	230	83.3	312	24	ABU67355 Human secreted pro
29	230	83.3	312	24	ABU59818 Novel secreted and
30	230	83.3	312	24	ABU64509 Human secreted/tra
31	230	83.3	312	24	ABU54357 Human secreted/tra
32	222	80.4	222	22	AAW41947 Human polypeptide
33	215	77.9	215	22	AAV70500 Angiogenesis prote
34	183	66.3	213	21	AAV32727 Human confuency r
35	166	60.1	303	22	AAV23693 Human EST encoded
36	107	38.8	107	22	AAV40161 Human polypeptide
37	89	32.2	388	22	ABG22341 Novel human diagno
38	73	26.4	140	22	ABG22338 Novel human diagno
39	69	25.0	69	22	ABG22339 Novel human diagno
40	51	18.5	66	22	ABG22340 Novel human diagno

ALIGNMENTS

RESULT 1

AAW75220
ID AAW75220 standard; Protein; 298 AA.

XX

AC AAW75220;

XX

DT 29-JAN-1999 (first entry)

XX Human secreted protein encoded by gene 25 clone HTEB42.

XX Human; secreted protein; fusion protein; gene therapy, protein therapy; diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia; developmental abnormality; foetal deficiency; blood; allergy; renal; immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma; inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS; cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus; osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion; endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.

XX Homo sapiens.

OS

XX

PH Key Location/Qualifiers

FT Misc-difference 42

FT /label= unknown

FT Misc-difference 58

FT /label= unknown

XX

PN WO9840483-A2.

XX

PD 17-SEP-1998.

XX

PF 12-MAR-1998; 98MO-US04858.

XX

PR 19-DEC-1997; 97US-0068368.

PR 14-MAR-1997; 97US-0040710.

PR 14-MAR-1997; 97US-0040762.

PR 30-MAY-1997; 97US-0048100.

PR 30-MAY-1997; 97US-0048189.
 PR 30-MAY-1997; 97US-0048357.
 PR 30-MAY-1997; 97US-0050934.
 PR 06-JUN-1997; 97US-0048970.
 PR 05-SEP-1997; 97US-0057765.
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA
 PI Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;
 PI Li H, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;
 PI Wei YF, Young PB, Zeng Z;
 XX WPI; 1998-520811/44.
 DR N-PSDB; AAV34310.
 XX
 XX Isolated human poly:nucleotide(s) encoding secretory peptide(s) -
 PT used to develop products for the diagnosis and treatment of e.g.
 PT inflammation, cancers, CNS disorders or immune system disorders
 XX
 XX Claim 1; Page 168-169; 201pp; English.
 XX
 CC This sequence represents a secreted human protein encoded by the gene
 CC clone detailed in the descriptor line. The gene can be used to generate
 CC fusion proteins by linking to the gene to a human immunoglobulin Fc
 CC portion (e.g. AAV34277) for increasing the stability of the fused
 CC protein as compared to the human protein only.
 CC The invention relates to 28 novel genes and their fragments (nucleic
 CC acid sequences: AAV34286-V34325; amino acid sequences AAW75196-W75235)
 CC which are useful for preventing, treating or ameliorating medical
 CC conditions e.g. by protein or gene therapy. Also, pathological
 CC conditions can be diagnosed by determining the amount of the new
 CC polypeptides in a sample or by determining the presence of mutations in
 CC the new polynucleotides. Specific uses are described for each of the 28
 CC polynucleotides, based on which tissues they are most highly expressed in
 CC (see AAV34286 for described uses).
 XX
 XX SQ Sequence 298 AA;
 Query Match 99.3%; Score 274; DB 19; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 YHKAYGFSAPKQDQVTVAVXQEQAILACKTPKTVXSRLEWKLGSRVSFVYQQTQGD 60
 Db 23 YHKAYGFSAPKQDQVTVAVXQEQAILACKTPKTVXSRLEWKLGSRVSFVYQQTQGD 82
 QY 61 FQNAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVTLVAVAPVPSCEVP 120
 Db 83 FQNAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVTLVAVAPVPSCEVP 142
 QY 121 SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRIGSQSTNSSTYNTKTGTLOFN 180
 Db 143 SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRIGSQSTNSSTYNTKTGTLOFN 202
 QY 181 TVSKLDTGEYSCEARNVGRRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYQAQ 240
 Db 203 TVSKLDTGEYSCEARNVGRRCPCGRMQVDDLNISGIIAAVVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSKTSFQKSNSSKATTSNDPKHTKSPFI 276
 Db 263 RKGYSKTSFQKSNSSKATTSNDPKHTKSPFI 298
 RESULT 2
 AAE26983
 ID AAE26983 standard; Protein; 298 AA.
 XX
 AC AAE26983;
 XX
 DT 13-DEC-2002 (first entry)
 XX
 DE Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
 XX

KW Human; immunodeficiency; X-linked agammaglobulinaemia; septic shock;
 KW autoimmune disorder; rheumatoid arthritis; multiple sclerosis; cancer;
 KW Grave's disease; diabetes mellitus; haematopoietic disorder; stroke;
 KW respiratory disorder; asthma; allergy; gastrointestinal disorder;
 KW inflammatory bowel disease; neurodegenerative disorder; hepatitis;
 KW Parkinson's disease; Alzheimer's disease; cardiovascular disorder;
 KW atherosclerosis; myocarditis; renal disorder; fungicide; virucide;
 KW hyperproliferative disorder; acute glomerulonephritis; tonsillitis;
 KW respiratory disorder; rhinitis; sinusitis; neurological disease;
 KW endocrine disorder; Addison's disease; reproductive system disorder;
 KW endometriosis; vasotropic; vulnery; cytostatic; nootropic; cardiant;
 XX anti-HIV; tranquilliser; gout; antiparasitic.
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH Peptide 1..22 /label= Signal_peptide
 FT Protein 23..298
 FT Misc-difference 42 /label= Unknown
 FT /note= "Human mature secreted protein"
 FT Misc-difference 58 /note= "Encoded by GWG"
 FT /label= Unknown
 FT /note= "Encoded by TSC"
 XX
 XX US2002077287-A1.
 XX 20-JUN-2002.
 XX 11-MAY-2001; 2001US-0852659.
 XX 11-SEP-1998; 98US-0152060.
 XX (RUBE/) RUBEN S M.
 XX (ROSE/) ROSEN C A.
 XX (LIYY/) LI Y.
 XX (ZENG/) ZENG Z.
 XX (FYAW/) KYAW H.
 XX (FISC/) FISCHER C L.
 XX (LIHH/) LI H.
 XX (SOPP/) SOPPET D R.
 XX (GENT/) GENTZ R L.
 XX (WEIY/) WEI Y.
 XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PB, Greene JM;
 PI Ferrie AM,
 XX WPI; 2002-598780/64.
 DR N-PSDB; AAD44660.
 XX
 XX Novel human secreted polypeptides and polynucleotides for diagnosing,
 PT preventing, treating immune, hyperproliferative, cardiovascular,
 PT neurological, reproductive disorders and identifying modulators of
 PT therapeutic use
 XX
 PS Claim 11; Page 186; 209pp; English.
 XX
 CC AAD44636-AAD44676 represent cDNAs corresponding to 28 human secreted
 CC protein genes, and AAE26959-AAE26999 represent the proteins they encode.
 CC AAE27000-AAE27025 represent human secreted protein fragments or their
 CC variants. The secreted proteins and genes are useful for preventing,
 CC treating or ameliorating medical conditions, e.g., by protein or gene
 CC therapy. Specific uses are described for each of the 28 genes, based
 CC on the tissues in which they are most highly expressed and include
 CC developing products for the diagnosis or treatment of immunodeficiencies,
 CC e.g., X-linked agammaglobulinaemia, B cell immunodeficiencies, severe
 CC combined immunodeficiencies, autoimmune disorders e.g., systemic lupus
 CC erythematosus, rheumatoid arthritis, multiple sclerosis, autoimmune
 CC thyroiditis, autoimmune haemolytic anaemia, Goodpasture's syndrome,
 CC Grave's disease, diabetes mellitus, dermatitis, inflammatory conditions

CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
CC disease, Crohn's disease, haematopoietic disorders, respiratory
CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,
CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
CC ischemic brain injury and/or stroke, neurodegenerative disorders e.g.,
CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
CC prion disease, cardiovascular disorders e.g., myocarditis, arrhythmias,
CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
CC related disorder (thrombosis, arterial thrombosis, atherosclerosis),
CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
CC renal disorders. e.g. acute glomerulonephritis, neurological diseases,
CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
CC disease, hyperpituitarism, infectious diseases and reproductive system
CC disorders e.g. endometriosis. The present sequence represents a human
CC secreted protein of the invention.

XX
SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVAVXVQBAIILACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 60
Db 23 YHKAYGFSAPKDDQVVAVXVQBAIILACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 82

QY 61 FKNRAEMIDFNIRIKNVTSDAGKYCEVSAPEQQONLEEDVTLEVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKYCEVSAPEQQONLEEDVTLEVLVAPVPSCEVP 142

QY 121 SSALSGTVVELRCQDEKGNPAPYTWFKDGIIRLENPRLGQSTNSYTNMTKTGLQFN 180
Db 143 SSALSGTVVELRCQDEKGNPAPYTWFKDGIIRLENPRLGQSTNSYTNMTKTGLQFN 202

QY 181 TVSKLDTGYSCEARNVGVRRCPGKRMQVDDLNSIGIIAAVVVALVSVCGLVGYCYAQ 240
Db 203 TVSKLDTGYSCEARNVGVRRCPGKRMQVDDLNSIGIIAAVVVALVSVCGLVGYCYAQ 262

QY 241 RKGYFSKETSFOKSNSSKATTMSNDPDKTKSFII 276
Db 263 RKGYFSKETSFOKSNSSKATTMSNDPDKTKSFII 298

RESULT 3
ID AAE27121
XX
AC AAE27121;
XX
DT 13-DEC-2002 (first entry)
XX
DE Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
XX
KW Human; secreted protein; autoimmune disease; hyperproliferative disorder;
KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
KW cerebral ischaemia; cardiovascular disorder; nervous system disorder;
KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
KW infection; corneal infection; skin aging; food additive; preservative;
KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
KW cardiant; vasotropic; cerebroprotective; neurotropic; neuroprotective;
KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
KW
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Peptide 1..22
FT FT /label= Signal_peptide
FT Protein 23..298
FT /note= "Mature human secreted protein"

FT Misc-difference 42 /label= Unknown
FT /note= "Encoded by GMG"
FT Misc-difference 58 /label= Unknown
FT /note= "Encoded by TSC"
XX US2002076756-A1.
XX 20-JUN-2002.
XX 11-MAY-2001; 2001US-0853161.
XX 02-FEB-2001; 2001US-265583P.
XX (RUBE/) RUBEN S M.
XX (ROSE/) ROSEN C A.
XX (LIYY/) LI Y.
XX (ZENG/) ZENG Z.
XX (KYAW/) KYAW H.
XX (FISC/) FISCHER C L.
XX (LIHH/) LI H.
XX (SOPP/) SOPPET D R.
XX (GENT/) GENTZ R L.
XX (WEIY/) WEI Y.
XX (MOOR/) MOORE P A.
XX (YOUN/) YOUNG P E.
XX (GREE/) GREENE J M.
XX (FERR/) FERRIE A M.
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
PI Ferrie AM;
XX WPI; 2002-574454/61.
DR N-PSDB; AAD44878.
XX
PT New nucleic acid molecules encoding 28 human secreted proteins, useful
PT for diagnosing, preventing, treating or ameliorating medical conditions
PT and as food additives or preservatives
XX
PS Claim 11; Page 186-187; 209pp; English.
XX
CC AAD44854-AAD44984 represent cDNAs corresponding to 28 human secreted
CC protein genes, and AAE27097-AAE27137 represent the proteins they encode.
CC AAE27138-AAE27164 represent human secreted protein fragments. The genes
CC and their corresponding secreted proteins are useful for preventing,
CC treating or ameliorating medical conditions, e.g., by protein or gene
CC therapy. Secreted protein sequences of the invention are useful for the
CC diagnosis or treatment of disorders such as autoimmune diseases (e.g.,
CC rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
CC the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
CC angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
CC system disorders (e.g. Alzheimer's disease), infections caused by fungi,
CC bacteria and viruses and ocular disorders (e.g. corneal infection). The
CC polypeptides can also be used to aid wound healing and epithelial cell
CC proliferation, to prevent skin aging due to sunburn, to maintain organs
CC before transplantation, for supporting cell culture of primary tissues,
CC to regenerate tissues and in chemotaxis. They can also be used as food
CC additives or preservative to increase or decrease storage capabilities,
CC fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
CC and other nutritional components. The present sequence represents a human
CC secreted protein of the invention.
XX
SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 23; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVAVXVQBAIILACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 60
Db 23 YHKAYGFSAPKDDQVVAVXVQBAIILACKTPKKTVXSRLEWKKLGRSVFVYQQTLOGD 82

Qy 61 FKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 120
Db 83 FKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 142
Qy 121 SSALSGTVELRCQDKEGNAPEYTFWFKDGIIRLLENPRLSQSTNSSTYTNKTGTTLQFN 180
Db 143 SSALSGTVELRCQDKEGNAPEYTFWFKDGIIRLLENPRLSQSTNSSTYTNKTGTTLQFN 202
Qy 181 TVSKLDGTGEYSCEARNVGYRRCPCGKRMQVDDNLISGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDGTGEYSCEARNVGYRRCPCGKRMQVDDNLISGIIAAVVVALVISVCGLGVCYQAQ 262
Qy 241 RKGYSKETSFOKNSSSKATMTSENDFKHTKSFII 276
Db 263 RKGYSKETSFOKNSSSKATMTSENDFKHTKSFII 298

RESULT 4
ABR47926
ID ABR47926 standard; Protein; 298 AA.
XX
AC ABR47926;
XX
DT 12-JUN-2003 (first entry)
XX
DE Human secreted protein, SEQ ID 817.
XX
KW Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
KW vulnary; antiinflammatory; nootropic; neuroprotective;
KW antiparkinsonian; gene therapy; human; cardiovascular disorder.
XX
OS Homo sapiens.
XX
PN WO200295010-A2.
XX
PD 28-NOV-2002.
XX
PF 19-MAR-2002; 2002WO-US09785.
XX
PR 21-MAR-2001; 2001US-277340P.
PR 19-JUL-2001; 2001US-306171P.
PR 13-NOV-2001; 2001US-331287P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-129429/12.
XX
PT Novel human secreted proteins, useful for detecting, preventing,
PT diagnosing, prognosticating, treating and/or ameliorating
PT cardiovascular disorders such as arrhythmia -
XX
PS Claim 13; SEQ ID 817; 1881pp; English.
XX
CC The present invention relates to novel human secreted proteins
CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
CC proteins and their coding sequences are useful for the preparation of a
CC diagnostic or pharmaceutical composition for diagnosing or treating a
CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
CC coronary arteriosclerosis and myocardial ischaemia), neural disorders,
CC immune system disorders, muscular disorders, reproductive disorders,
CC gastrointestinal disorders, pulmonary disorders, renal disorders,
CC proliferative disorders and/or cancerous diseases and conditions, for
CC wound healing and epithelial cell proliferation, to treat inflammation or
CC infection, for treating thrombosis and arteriosclerosis, for treating or
CC preventing neural damage which occurs in neuronal disorders or
CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
CC disease, to enhance bone and periodontal regeneration and aid in tissue
CC transplants or bone grafts, to prevent skin aging or hair loss, to
CC stimulate growth and differentiation of haematopoietic cells and bone
CC marrow cells when used in combination with other cytokines, to maintain

CC organs before transplantation or for supporting cell culture of primary
CC tissues, to increase or decrease differentiation or proliferation of
CC embryonic stem cells, or to modulate mammalian characteristics or
CC metabolism.
CC Note: The sequence data for this patent was published in electronic
CC format and is available from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 298 AA;
Query Match 99.3%; Score 274; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 YHKAYGFSAPKQDQVTVAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFYVYQOTLQGD 60
Db 23 YHKAYGFSAPKQDQVTVAVYQEAAILACKTPKKTXXSRLEWKKLGRSVSFYVYQOTLQGD 82
Qy 61 FKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 120
Db 83 FKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 142
Qy 121 SSALSGTVELRCQDKEGNAPEYTFWFKDGIIRLLENPRLSQSTNSSTYTNKTGTTLQFN 180
Db 143 SSALSGTVELRCQDKEGNAPEYTFWFKDGIIRLLENPRLSQSTNSSTYTNKTGTTLQFN 202
Qy 181 TVSKLDGTGEYSCEARNVGYRRCPCGKRMQVDDNLISGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDGTGEYSCEARNVGYRRCPCGKRMQVDDNLISGIIAAVVVALVISVCGLGVCYQAQ 262
Qy 241 RKGYSKETSFOKNSSSKATMTSENDFKHTKSFII 276
Db 263 RKGYSKETSFOKNSSSKATMTSENDFKHTKSFII 298

RESULT 5
ABU64994
ID ABU64994 standard; Protein; 298 AA.
XX
AC ABU64994;
XX
DT 15-MAY-2003 (first entry)
XX
DE Human secreted protein gene 25, protein.
XX
KW Secreted protein; immunodeficiency; multiple sclerosis;
KW severe combined immunodeficiency; autoimmune disorder; cancer;
KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;
KW inflammatory condition; septic shock; inflammatory bowel disease;
KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;
KW gastrointestinal disorder; central nervous system disorder;
KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;
KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;
KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;
KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;
KW endocrine disorder; liver disease; reproductive system disorder;
KW endometriosis; infectious disease; pancreatic disorder; vaccine;
KW wound repair; angiogenesis; lymphatic disorder; hair loss; body weight;
KW body height; hair colour; human.
XX
OS Homo sapiens.
XX
PN US2002172994-A1.
XX
PD 21-NOV-2002.
XX
PF 11-MAY-2001; 2001US-0852797.
XX
PR 14-MAR-1997; 97US-040710P.
PR 14-MAR-1997; 97US-040762P.
PR 30-MAY-1997; 97US-048100P.
PR 30-MAY-1997; 97US-048189P.
PR 30-MAY-1997; 97US-048357P.

PR 30-MAY-1997; 97US-050934P.
 PR 06-JUN-1997; 97US-048970P.
 PR 05-SEP-1997; 97US-057765P.
 PR 19-DEC-1997; 97US-068368P.
 PR 02-FEB-2001; 2001US-265583P.
 PR 12-MAR-1998; 98WO-US048583P.
 PR 11-SEP-1998; 98US-0152060.
 XX (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYY/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (KYAW/) KYAW H.
 PA (FISC/) FISCHER C L.
 PA (LIHH/) LI H.
 PA (SOPP/) SOPPET D R.
 PA (GENT/) GENTZ R L.
 PA (WEIY/) WEI Y.
 PA (MOOR/) MOORE P A.
 PA (YOUN/) YOUNG P E.
 PA (GREE/) GREENE J M.
 PA (FERR/) FERRIE A M.
 XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 PI Ferrie AM;
 XX WPI; 2003-310989/30.
 DR N-PSDB; ABX96990.
 XX
 XX New human secreted polypeptides and polynucleotides for diagnosing,
 PT prognosing, preventing and treating immune, hyperproliferative, liver,
 PT kidney, reproductive disorders and for identifying modulators of
 PT therapeutic use -
 PT
 XX Claim 11; Page 186; 209pp; English.
 XX
 CC The invention relates to an isolated polypeptide comprising an amino acid
 CC sequence at least 95% identical to sequence of 28 human secreted
 CC proteins, their fragment, polypeptide domain, epitope, secreted form,
 CC variant, allelic variant, or species homologue, or the encoded sequence
 CC included in ATCC 97921 and 97922. Also included are the encoding
 CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
 CC The proteins and nucleic acids are useful for diagnosing, preventing,
 CC treating, prognosing or ameliorating a medical condition e.g.
 CC immunodeficiencies (e.g. X-linked agammaglobulinemia, B cell
 CC disorders (e.g. systemic erythematous, rheumatoid arthritis, multiple
 CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
 CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
 CC haematopoietic disorders, inflammatory conditions (e.g. septic shock,
 CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
 CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
 CC disorders, cancers (e.g. gastric, ovarian, lung, bladder, liver and
 CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
 CC injury and/or stroke, traumatic brain injury), neurodegenerative
 CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
 CC demetia, and prion disease), cardiovascular disorders (e.g.
 CC atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
 CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
 CC pancreatitis, sarcoidosis, dermatitis, allogeneic transplant rejection),
 CC blood-related disorders (thrombosis, arterial thrombosis),
 CC hyperproliferative disorders, renal disorders (e.g. acute
 CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
 CC hyperthyroidism, hypoparathyroidism), liver diseases and disorders,
 CC reproductive system disorders (e.g. endometriosis), infectious diseases,
 CC and pancreatic disorders. Many other diseases and disorders are listed in
 CC the specification. They also useful as a vaccine adjuvant. Further they
 CC are useful to enhance or inhibit complement mediated cell lysis, for
 CC stimulating wound and tissue repair, angiogenesis, and the repair of
 CC vascular or lymphatic diseases or disorders. They are also useful
 CC to prevent hair loss, to modulate mammalian characteristics such as body
 CC height, weight, hair colour, and to increase or decrease storage

CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
 CC minerals, cofactors or other nutritional components. The proteins are
 CC also useful for identifying binding partners. The present sequence
 CC represents a secreted protein of the invention.
 XX
 SQ Sequence 298 AA;
 Query Match 99.3%; Score 274; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260; Indels 0; Gaps 0;
 Matches 276; Conservative 0; Mismatches 0;
 QY 1 YHKAYGFSAPKQDQVVTAVXYQEAAILACKTPKTVXSRLEWKKLGRSVSFVYYQQTLOGD 60
 DB 23 YHKAYGFSAPKQDQVVTAVXYQEAAILACKTPKTVXSRLEWKKLGRSVSFVYYQQTLOGD 82
 QY 61 FKNAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTVTLEVLVAPVPSCEVP 120
 DB 83 FKNAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTVTLEVLVAPVPSCEVP 142
 QY 121 SSALSGTVVELRCQDKEGNPAPEYTWPKDGRIRLLENPRLGSGQSTNSSVTMTKTGTLOFN 180
 DB 143 SSALSGTVVELRCQDKEGNPAPEYTWPKDGRIRLLENPRLGSGQSTNSSVTMTKTGTLOFN 202
 QY 181 TVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGIIAAVVVVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGVYRRCPCGRMQVDDLNISGIIAAVVVVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSKTSFQKSNSSSKATTMSNDPKTKSPFI 276
 DB 263 RKGYSKTSFQKSNSSSKATTMSNDPKTKSPFI 298
 RESULT 6
 ID ABR00172 standard; Protein; 298 AA.
 XX
 AC ABR00172;
 DT 03-APR-2003 (first entry)
 DE Human gene 162 encoded secreted protein HTEEB42, SEQ ID NO:461.
 XX
 KW Human; secreted protein; digestive disorder; gastrointestinal disorder;
 KW mouth; oesophagus; stomach; small intestine; large intestine; liver;
 KW biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
 KW immune disorder; inflammation; infection; wound healing; drug screening;
 KW chromosome identification; chromosome mapping; cytostatic; gene therapy;
 KW antiinflammatory; immunosuppressive; vulnery; chromosome 21q21.2.
 XX
 OS Homo sapiens.
 XX
 PN W0200276488-A1.
 XX
 PD 03-OCT-2002.
 XX
 XX 19-MAR-2002; 2002WO-US08276.
 PF
 XX 21-MAR-2001; 2001US-277340P.
 PR 19-JUL-2001; 2001US-306171P.
 PR 13-NOV-2001; 2001US-331287P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 XX Rosen CA, Ruben SM;
 PI WPI; 2003-029900/02.
 XX N-PSDB; AB271351.
 DR
 XX New human secreted proteins and nucleic acids, useful for detecting,
 PT preventing, diagnosing, prognosticating, treating and/or ameliorating
 PT e.g. gastrointestinal diseases and disorders, or cancers -
 XX
 XX Claim 13; Page 1046-1047; 1216pp; English.

XX AB271190-AB271478 represent cDNAs corresponding to 178 human secreted
 CC protein genes, and ABP0011-ABP00299 represent the proteins they encode.
 CC AB271479-AB271540 represent human secreted protein genomic fragments. The
 CC invention also encompasses antibodies specific for the secreted proteins,
 CC the use of the secreted proteins in drug screening, and recombinant
 CC vectors and host cells comprising a nucleic acid of the invention. The
 CC secreted proteins, nucleic acids encoding them, antibodies or antibody
 CC fragments specific for the secreted proteins, and modulators of protein
 CC activity are useful for diagnosing, treating, ameliorating or preventing
 CC digestive disorders. Such conditions include disorders of the mouth,
 CC oesophagus, stomach, small intestine, large intestine, liver, biliary
 CC tract and pancreas, and include cancers of these organs and tissues. The
 CC secreted proteins and their nucleic acids may also be used in the
 CC treatment of immune disorders, inflammation, infection,
 CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
 CC of the invention may be used for chromosome identification, chromosome
 CC mapping, in gene therapy, for identifying individuals from minute
 CC biological samples, as hybridisation probes, and as molecular weight
 CC markers. The present sequence represents a human secreted protein of the
 CC invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 YKAYGFSAPKQQQVAVXYQEAIALCKTPKTVXSRLEWKLGSRVSFVYQQTQQD 60
 DB 23 YKAYGFSAPKQQQVAVXYQEAIALCKTPKTVXSRLEWKLGSRVSFVYQQTQQD 82
 QY 61 FKRAEMIDFNIRIKNTRSDAGKYRCEVSPSQGNLEEDTTLVLVAPVPSCEVP 120
 DB 83 FKRAEMIDFNIRIKNTRSDAGKYRCEVSPSQGNLEEDTTLVLVAPVPSCEVP 142
 QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWFDGIRLLENPRLGQSQTNSSTYTNKTTGTLQFN 180
 DB 143 SSALSGTVVELRCQDKEGNPAPEYTFWFDGIRLLENPRLGQSQTNSSTYTNKTTGTLQFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCRGMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCRGMQVDDNLNIGIIAAVVVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSFKTSFKNSSSKATMTSENDFKHTKSFII 276
 DB 263 RKGYSFKTSFKNSSSKATMTSENDFKHTKSFII 298

RESULT 7

AAW85457
 ID AAW85457 standard; Protein; 298 AA.

XX AC AAW85457;

XX DT 25-FEB-1999 (first entry)

XX DE Secreted protein encoded by clone ct864_4.

XX KW Secreted protein; nutritional activity; immune stimulating; vaccine;
 KW suppressing activity; haematopoiesis regulating activity;
 KW tissue growth activity; activin; inhibin activity; chemotaxis;
 KW chemokinetic activity; haemostasis; thrombolytic activity; receptor;
 KW ligand; anti-inflammation; cadherin; tumour invasion suppressor;
 KW tumour inhibition; gene therapy.

XX OS Homo sapiens.

XX XX WO9842739-A2.

XX PN 01-OCT-1998.

XX PD 20-MAR-1998; 98WO-US05653.

XX PF

XX 19-MAR-1998; 98US-0044466.
 PR 21-MAR-1997; 97US-0822167.
 XX (GEWY) GENETICS INST INC.
 XX AGostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;
 PI Racie LA, Spaulding V, Treacy M;
 XX WPI; 1998-609890/51.
 DR N-PSDB; AAV82780.
 XX New polynucleotides encoding secreted human proteins - derived from
 PT human foetal brain, adult brain, foetal kidney, placenta or adult
 PT pineal gland cDNA libraries.
 XX Claim 17; Page 73-74; 113pp; English.
 PS The present sequence represents a secreted protein. The polynucleotide
 CC and secreted protein are predicted to have biological activities which
 CC would make them suitable for treating, preventing or ameliorating medical
 CC conditions in humans and animals, although no supporting data is given.
 CC Suggested activities include nutritional activity, immune stimulating
 CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
 CC activity, tissue growth activity, activin/inhibin activity,
 CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
 CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
 CC invasion suppressor activity, and tumour inhibition activity (no data is
 CC given in the specification to support these activities). The
 CC polynucleotide is also stated to be useful for gene therapy.

XX SQ Sequence 298 AA;

Query Match 87.0%; Score 240; DB 19; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLEWKLGSRVSFVYQQTQQDQFNRAEMIDFNIRIKNTRSDAGKYRCEVSPSQE 96
 DB 59 SRLEWKLGSRVSFVYQQTQQDQFNRAEMIDFNIRIKNTRSDAGKYRCEVSPSQE 118
 QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFDGIRLLEN 156
 DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFDGIRLLEN 178
 QY 157 PRLGQSQTNSSTYTNKTTGTLQFNVTGTLQFNVTGTLQFNVTGTLQFNVTGTLQFN 216
 DB 179 PRLGQSQTNSSTYTNKTTGTLQFNVTGTLQFNVTGTLQFNVTGTLQFNVTGTLQFN 238
 QY 217 GIIAAVVVVALVISVCGLGVCYARKGYSFKTSFKNSSSKATMTSENDFKHTKSFII 276
 DB 239 GIIAAVVVVALVISVCGLGVCYARKGYSFKTSFKNSSSKATMTSENDFKHTKSFII 298

RESULT 8

AAU00512
 ID AAU00512 standard; Protein; 298 AA.

XX AC AAU00512;

XX DT 09-MAY-2001 (first entry)

XX DE Human junctional adhesion protein (JAM2).

XX KW Junctional adhesion protein; JAM2; cellular localisation;
 KW cellular expression; immunoprecipitation; stroke; phosphorylation;
 KW glycosylation; paracellular migration; inflammatory disease;
 KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
 KW Crohn's disease.

XX OS Homo sapiens.

XX XX Key

Location/Qualifiers

FT Peptide 1..20 /note= "Possible signal peptide #1"
 FT Peptide 1..28 /note= "Possible signal peptide #2"
 FT Protein 21..298 /note= "Possible mature JAM2 #1"
 FT Protein 29..298 /note= "Possible mature JAM2 #2"
 FT Domain 237..254 /note= "Transmembrane domain"
 XX
 XX WO200114404-A1.
 PN
 XX
 XX 01-MAR-2001.
 PD
 XX
 XX 23-AUG-2000; 2000WO-US231158.
 PF
 XX
 XX 24-AUG-1999; 99US-0150459.
 PR
 XX
 XX (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 PA
 XX
 XX Cunningham S, Trindad Arrate Barros M;
 PI
 XX
 XX WPI; 2001-218425/22.
 DR
 XX
 XX N-PSDB; AAS00512.
 PS
 XX
 XX Novel nucleic acids encoding human junctional adhesion protein useful
 PT for producing antibodies that are suitable for therapeutic purposes -
 PT
 XX
 XX Claim 4; Page 46-47; 51pp; English.
 XX
 XX The sequence represents a human junctional adhesion molecule 2 (JAM2).
 CC The polynucleotide encoding the polypeptide is useful for recombinant
 CC production of JAM-2 protein, which in turn is useful for the production
 CC of antibodies. The antibodies may be used for probing cellular
 CC localisation and/or expression of JAM2 in tissues under normal and
 CC disease states, for immunoprecipitating JAM2 protein from cells and/or
 CC stroke tissues to determine whether it is modified by glycosylation and
 CC phosphorylation, and for determining JAM2 function. The antibodies
 CC inhibit interaction of JAM2 with inflammatory cells or influences their
 CC paracellular migration, and is therefore useful for alleviating
 CC inflammatory diseases such as arthritis, asthma, rheumatoid arthritis,
 CC inflammatory bowel disease and Crohn's disease.
 XX
 XX
 SQ Sequence 298 AA;

Query Match 87.0%; Score 240; DB 22; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSVFYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
 |||||
 Db 59 SRLEWKKLGRSVSVFYVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
 |||||
 QY 97 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGRILLEN 156
 |||||
 Db 119 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTWFKDGRILLEN 178
 |||||
 QY 157 PRLGQSQTNSSTYMTNKTGTLOFNTVSKLDTGEYSCEARNSVGYRCPCKRMQVDDNLIS 216
 |||||
 Db 179 PRLGQSQTNSSTYMTNKTGTLOFNTVSKLDTGEYSCEARNSVGYRCPCKRMQVDDNLIS 238
 |||||
 QY 217 GIIAVWVVALVISVCGLGVCVQAQRGYSFKTSFKNSSSKATMTSENDFKHTKSFII 276
 |||||
 Db 239 GIIAVWVVALVISVCGLGVCVQAQRGYSFKTSFKNSSSKATMTSENDFKHTKSFII 298
 |||||

RESULT 9
 ABP61801
 ID ABP61801 standard; Protein; 298 AA.
 XX
 AC ABP61801;
 XX

DT 04-OCT-2002 (first entry)
 XX
 XX Human polypeptide SEQ ID NO 155.
 DE
 XX
 XX Human; cytostatic; antirheumatic; antiarthritic; vulnerary; analgesic;
 KW antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
 KW neuroprotective; nootropic; osteopathic; haemostatic; vasotropic;
 KW antitumor; fungicide; antidiabetic; antiasthmatic; antiallergic;
 KW immunostimulant; antiparasitic; secreted protein; transmembrane protein;
 KW cytokine; cell proliferation; cell differentiation; autoimmune disease;
 KW stem cell; growth factor; nervous system disease; neuropathy;
 KW Alzheimer's disease; Parkinson's disease; Huntington's disease;
 KW osteoporosis; severe combined immunodeficiency; SCID; infection;
 KW multiple sclerosis; rheumatoid arthritis; gene therapy.
 XX
 OS Homo sapiens.
 XX
 XX US2002065394-A1.
 PN
 XX
 XX 30-MAY-2002.
 PD
 XX
 XX 22-DEC-2000; 2000US-0745763.
 PF
 XX
 XX 18-MAR-1998; 98US-0040963.
 PR
 XX
 XX (JACO/) JACOBS K.
 PA (MCCO/) MCCOY J M.
 PA (LAVA/) LAVALLIE E R.
 PA (COLL/) COLLINS-RACIE L A.
 PA (EVAN/) EVANS C.
 PA (MERB/) MERBERG D.
 PA (TREA/) TREACY M.
 PA (SPAU/) SPAULDING V.
 XX
 XX Jacobs K, McCoy JM, LaVallie ER, Collins-Racie LA, Evans C;
 PI Merberg D, Treacy M, Spaulding V;
 PI
 XX
 XX WPI; 2002-582343/62.
 DR
 XX
 XX N-PSDB; ABQ92017.
 DR
 XX
 XX Novel secreted or transmembrane protein and polynucleotide encoding the
 PT protein, useful for diagnosis and treatment of neurological disorders,
 PT cancer, autoimmune diseases, bone disorders and lung or liver fibrosis
 PT
 XX
 XX
 PS Claim 54; Page 116-117; 284pp; English.
 XX
 CC The invention relates to human secreted or transmembrane protein (I),
 CC their fragments and is encoded by specific complementary deoxyribonucleic
 CC acid (cDNA) inserts (II), where the protein is substantially free from
 CC other mammalian proteins. (I) are useful for preventing, treating or
 CC ameliorating a medical condition, especially immunological treatment or
 CC prevention of tumours. (I) exhibits activity relating to angiogenesis,
 CC cytokine, cell proliferation, cell differentiation, antiinflammatory,
 CC stem cell growth factor activity and activin or inhibin-related
 CC activities. (I) can be used to manipulate stem cells in culture to give
 CC rise to neuroepithelial cells that can be used to augment or replace
 CC cells damaged by illness, autoimmune disease, accidental damage or
 CC genetic disorders. (I) induces the proliferation of neural cells and
 CC regeneration of nerve and brain tissue and is useful for the treatment of
 CC central and peripheral nervous system diseases and neuropathies, such as
 CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
 CC lateral sclerosis. (I) is involved in chemotactic or chemokinetic
 CC or lymphoid cell disorders, platelet disorders such as thrombocytopaenia
 CC and for regeneration of bone, cartilage, tendon, ligament and/or nerve
 CC tissue growth and in tissue repair, healing of burns, incisions, ulcers,
 CC for treating osteoporosis, osteoarthritis, bone degenerative disorders or
 CC periodontal disease. (I) is also useful for gut protection or
 CC regeneration and treatment of lung or liver fibrosis, reperfusion injury
 CC in various tissues, various immune deficiencies and disorders including
 CC severe combined immunodeficiency (SCID), bacterial or fungal infections,
 CC autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,

CC diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
 CC such as asthma or other respiratory problems. (II) is useful to express
 CC recombinant protein, as markers for tissues in which the corresponding
 CC protein is preferentially expressed and in gene therapy. The present
 CC sequence is that of a polypeptide of the invention.

XX Sequence 298 AA;

Query Match 87.0%; Score 240; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKILGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQQ 96
 DB 59 SRLEWKILGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQQ 118
 QY 97 QNLEEDTTLVLVAVAPVPSCEVPSSALSGTVVELRCQDEGNPAPEYTFWFGDGLRLLEN 156
 DB 119 QNLEEDTTLVLVAVAPVPSCEVPSSALSGTVVELRCQDEGNPAPEYTFWFGDGLRLLEN 178
 QY 157 PRLGSQSTNSSTYNTMTKTGTLOFNTVSKLDTGEYSCARNVGVYRRCPCGKMQVDDNLIS 216
 DB 179 PRLGSQSTNSSTYNTMTKTGTLOFNTVSKLDTGEYSCARNVGVYRRCPCGKMQVDDNLIS 238
 QY 217 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFOKSNSSSKATTMSSEDFKHTKSFII 276
 DB 239 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFOKSNSSSKATTMSSEDFKHTKSFII 298

RESULT 10
 AA016452

ID AA016452 standard; protein; 298 AA.

AC AA016452;

XX 17-APR-2003 (first entry)

XX Human junctional adhesion molecule 2 (huJAM2).

XX Human; gene therapy; extracellular region; junctional adhesion molecules;
 KW huJAM; immune system disorder; immune deficiency; autoimmune disorder;
 KW inflammatory disorder; cancer; wound healing; cardiovascular disease;
 KW full-length membrane-bound huJAM protein.

XX Homo sapiens.

XX Location/Qualifiers

FT Peptide 1..28

FT Domain /label= Signal_peptide

FT /note= "Extracellular domain; Specifically claimed

FT Protein 29..298

FT /note= "Mature huJAM2"

XX WO2003008541-A2.

PN 30-JAN-2003.

XX 05-JUL-2002; 2002WO-US19800.

XX 16-JUL-2001; 2001US-305752P.

PR 05-FEB-2002; 2002US-354345P.

XX (ELIL) LILLY & CO ELI.

XX Heuer JG, Smith RC, Su EW;

XX WPI; 2003-221848/21.

DR N-PSDB; AAL51599.

XX New extracellular human junctional adhesion molecule (huJAM)

PT polypeptide, useful for treating an immune system disorder such as an

PT immune deficiency or an inflammatory disorder, cancer, wound healing,
 PT or a cardiovascular disease -

XX Disclosure; Fig 1; 131pp; English.

XX The invention comprises the DNA and protein sequences of the
 CC extracellular region of human junctional adhesion molecules (huJAM). The
 CC extracellular huJAM DNA and protein sequences are useful in the treatment
 CC of: immune system disorders (e.g. immune deficiency); autoimmune
 CC disorders; inflammatory disorders; cancer; wound healing; or a
 CC cardiovascular disease. The present amino acid sequence represents the
 CC full-length membrane-bound huJAM2 protein.

XX Sequence 298 AA;

Query Match 87.0%; Score 240; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKILGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQQ 96
 DB 59 SRLEWKILGRSVSFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQQ 118
 QY 97 QNLEEDTTLVLVAVAPVPSCEVPSSALSGTVVELRCQDEGNPAPEYTFWFGDGLRLLEN 156
 DB 119 QNLEEDTTLVLVAVAPVPSCEVPSSALSGTVVELRCQDEGNPAPEYTFWFGDGLRLLEN 178
 QY 157 PRLGSQSTNSSTYNTMTKTGTLOFNTVSKLDTGEYSCARNVGVYRRCPCGKMQVDDNLIS 216
 DB 179 PRLGSQSTNSSTYNTMTKTGTLOFNTVSKLDTGEYSCARNVGVYRRCPCGKMQVDDNLIS 238
 QY 217 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFOKSNSSSKATTMSSEDFKHTKSFII 276
 DB 239 GIIAAVVVVALVISVCGLGVCYAKRGYFSKETSFOKSNSSSKATTMSSEDFKHTKSFII 298

RESULT 11
 AA08060

ID AA08060 standard; Protein; 312 AA.

XX AA08060;

XX 11-SEP-2000 (first entry)

XX Human PRO245 protein.

XX Inflammatory cell infiltration; immune response; T cell proliferation;
 KW anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthritis;
 KW T cell-mediated disease; spondyloarthritis; sclerosis; renal disease;
 KW inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 KW diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 KW multiple sclerosis; polynuropathy; hepatitis; cirrhosis; enteropathy;
 KW sclerosing cholangitis; inflammatory bowel disease; whipple's disease;
 KW skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 KW food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 KW idiopathic pulmonary fibrosis; graft rejection; PRO245; human.

XX Homo sapiens.

XX WO9914241-A2.

XX 25-MAR-1999.

XX 17-SEP-1998; 98WO-US19437.

XX 17-SEP-1997; 97US-0059119.

XX 18-SEP-1997; 97US-0059263.

XX 28-OCT-1997; 97US-0063550.

XX 12-NOV-1997; 97US-0065186.

XX 21-NOV-1997; 97US-0066364.

XX 04-JUN-1996; 98US-0086770.

XX 98US-0086026.

QY 157 PRIGSOSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVGVYRCPCGKRMQVDDLNIS 216
 |||||
 Db 179 PRIGSOSTNSSYTMNTKTGTLOFNTVSKLDTGYSCEARNVGVYRCPCGKRMQVDDLNIS 238
 |||||
 QY 217 GIIAAVVVVALVSVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMSEN 266
 |||||
 Db 239 GIIAAVVVVALVSVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMSEN 288
 |||||
 RESULT 13
 AAY13354
 ID AAY13354 standard; Protein; 312 AA.
 XX
 AC AAY13354;
 XX
 DT 25-JUN-1999 (first entry)
 XX
 DE Amino acid sequence of protein PRO245.
 XX
 KW Secreted protein; transmembrane protein; human; enterocolitis;
 KW Zollinger-Ellison syndrome; Gastrointestinal ulceration;
 KW congenital microvillus atrophy; skin disease; cell growth;
 KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
 KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
 KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
 KW anti-thrombotic; wound healing; tissue repair.
 XX
 OS Homo sapiens.
 XX
 PN WO9914328-A2.
 XX
 PD 25-MAR-1999.
 XX
 PF 16-SEP-1998; 98WO-US19330.
 XX
 PR 25-NOV-1997; 97US-0066840.
 PR 17-SEP-1997; 97US-0059113.
 PR 17-SEP-1997; 97US-0059115.
 PR 17-SEP-1997; 97US-0059117.
 PR 17-SEP-1997; 97US-0059119.
 PR 17-SEP-1997; 97US-0059121.
 PR 17-SEP-1997; 97US-0059122.
 PR 17-SEP-1997; 97US-0059184.
 PR 18-SEP-1997; 97US-0059263.
 PR 18-SEP-1997; 97US-0059266.
 PR 15-OCT-1997; 97US-0062125.
 PR 17-OCT-1997; 97US-0062285.
 PR 17-OCT-1997; 97US-0062287.
 PR 21-OCT-1997; 97US-0063486.
 PR 24-OCT-1997; 97US-0062814.
 PR 24-OCT-1997; 97US-0064816.
 PR 24-OCT-1997; 97US-0063045.
 PR 24-OCT-1997; 97US-0063120.
 PR 24-OCT-1997; 97US-0063121.
 PR 24-OCT-1997; 97US-0063127.
 PR 24-OCT-1997; 97US-0063128.
 PR 27-OCT-1997; 97US-0063329.
 PR 27-OCT-1997; 97US-0063327.
 PR 28-OCT-1997; 97US-0063541.
 PR 28-OCT-1997; 97US-0063542.
 PR 28-OCT-1997; 97US-0063544.
 PR 28-OCT-1997; 97US-0063549.
 PR 28-OCT-1997; 97US-0063550.
 PR 29-OCT-1997; 97US-0063343.
 PR 29-OCT-1997; 97US-0063704.
 PR 29-OCT-1997; 97US-0063732.
 PR 29-OCT-1997; 97US-0063738.
 PR 29-OCT-1997; 97US-0063734.
 PR 29-OCT-1997; 97US-0064215.
 PR 29-OCT-1997; 97US-0063735.
 PR 31-OCT-1997; 97US-0063870.

PR 31-OCT-1997; 97US-0064103.
 PR 03-NOV-1997; 97US-0064248.
 PR 07-NOV-1997; 97US-0064809.
 PR 12-NOV-1997; 97US-0065186.
 PR 17-NOV-1997; 97US-0065846.
 PR 18-NOV-1997; 97US-0065893.
 PR 21-NOV-1997; 97US-0066120.
 PR 21-NOV-1997; 97US-0066364.
 PR 24-NOV-1997; 97US-0066772.
 PR 24-NOV-1997; 97US-0066466.
 PR 24-NOV-1997; 97US-0066770.
 PR 24-NOV-1997; 97US-0066511.
 PR 24-NOV-1997; 97US-0066453.
 XX
 PA (GETH) GENENTECH INC.
 XX
 XX
 PI Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
 XX
 XX WPI; 1999-229533/19.
 DR N-PSDB; AAX52225.
 XX
 PT New isolated human genes and polypeptides used in, e.g. treatment of
 PT gastrointestinal ulceration
 XX
 PS Claim 12; Fig 24; 320pp; English.
 XX
 CC AAY13344-403 represent secreted and transmembrane human proteins.
 CC The cDNA sequences are obtained from cDNA libraries, prepared from
 CC fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
 CC The encoded polypeptides have specific uses based on their homology to
 CC known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
 CC associated with the preservation and maintenance of gastrointestinal
 CC mucosa and the repair of acute and chronic mucosal lesions
 CC (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
 CC ulceration and congenital microvillus atrophy), skin diseases associated
 CC with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
 CC cancers such as lung squamous cell carcinoma of the vulva and gliomas),
 CC potent effects on cell growth and development, diseases related to
 CC growth or survival of nerve cells including Parkinson's disease,
 CC Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as
 CC for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used
 CC as a target for anti-tumor drugs. PRO533 may be used in the treatment
 CC of Usher Syndrome or Atrophia areata; PRO269 can be used as an
 CC anti-thrombotic agent; PRO287 polypeptides and portions may have
 CC therapeutic applications in wound healing and tissue repair; PRO317 can
 CC be used for treating problems of the kidney, uterus, endometrium, blood
 CC vessels, or related tissue, e.g. in the heart of genital tract.
 XX
 SQ Sequence 312 AA;
 Query Match 83.3%; Score 230; DB 20; Length 312;
 Best Local Similarity 100.0%; Pred. No. 2.1e-217;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLEWKKLGRSVSFVYQQTLLQGDPKNAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
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 Db 59 SRLEWKKLGRSVSFVYQQTLLQGDPKNAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
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 QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTWKDGIRLLEN 156
 |||||
 Db 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVELRCODKEGNPAPEYTWKDGIRLLEN 178
 |||||
 QY 157 PRIGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGVYRCPCGKRMQVDDLNIS 216
 |||||
 Db 179 PRIGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGVYRCPCGKRMQVDDLNIS 238
 |||||
 QY 217 GIIAAVVVVALVSVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMSEN 266
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 Db 239 GIIAAVVVVALVSVCGLGVCYAQRKGYSKTSFQKSNSSSKATTMSEN 288
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RESULT 14
 AAB33421

ID AAB33421 standard; Protein; 312 AA.
XX AAB33421;
AC
XX
XX
DT 29-JAN-2001 (first entry)
XX
DE Human PRO245 protein UNQ219 SEQ ID NO:36.
XX
XX Human; immune related disease; diagnosis; antinflammatory; cardiant;
KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
KW haemostatic; antithyroid; antidiabetic; neutropic; neuroprotective;
KW ancaemic; hepatotropic; virucide; antipsoriatic; anti-allergic;
KW osteoarthritis; systemic lupus erythematosus; rheumatoid arthritis;
KW idiopathic inflammatory myopathy; Sjogren's syndrome; sarcoidosis;
KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
KW autoimmune thrombocytopenia; immune-mediated renal disease;
KW demyelinating disease; hepatobiliary disease; Whipple's disease;
KW inflammatory bowel disease; gluten-sensitive enteropathy;
KW autoimmune disease; immune-mediated skin disease; allergic disease;
KW immunological disease; transplantation associated disease;
KW Graft rejection; graft-versus-host-disease.
XX
OS Homo sapiens.
XX
XX W0200053758-A2.
XX
XX
XX
XX 14-SEP-2000.
XX
XX 02-MAR-2000; 2000WO-US05841.
XX
XX 08-MAR-1999; 99WO-US05028.
XX 10-MAR-1999; 99US-0123618.
XX 12-MAR-1999; 99US-0123957.
XX 23-MAR-1999; 99US-0125775.
XX 12-APR-1999; 99US-0128849.
XX 20-APR-1999; 99WO-US08615.
XX 28-APR-1999; 99US-0131445.
XX 04-MAY-1999; 99US-0132371.
XX 14-MAY-1999; 99US-0134287.
XX 02-JUN-1999; 99WO-US12252.
XX 23-JUN-1999; 99US-0141037.
XX 20-JUL-1999; 99US-0144758.
XX 26-JUL-1999; 99US-0145698.
XX 28-JUL-1999; 99US-0146222.
XX 01-SEP-1999; 99WO-US20111.
XX 08-SEP-1999; 99WO-US20594.
XX 13-SEP-1999; 99WO-US20944.
XX 15-SEP-1999; 99WO-US21090.
XX 15-SEP-1999; 99WO-US21547.
XX 05-OCT-1999; 99WO-US23089.
XX 29-OCT-1999; 99US-0162506.
XX 29-NOV-1999; 99WO-US28214.
XX 30-NOV-1999; 99WO-US28313.
XX 30-NOV-1999; 99WO-US28409.
XX 01-DEC-1999; 99WO-US28301.
XX 01-DEC-1999; 99WO-US28634.
XX 02-DEC-1999; 99WO-US28551.
XX 02-DEC-1999; 99WO-US28564.
XX 02-DEC-1999; 99WO-US28565.
XX 16-DEC-1999; 99WO-US30095.
XX 20-DEC-1999; 99WO-US30999.
XX 30-DEC-1999; 99WO-US31274.
XX 05-JAN-2000; 2000WO-US00219.
XX 06-JAN-2000; 2000WO-US00277.
XX 11-FEB-2000; 2000WO-US00376.
XX 18-FEB-2000; 2000WO-US04341.
XX 18-FEB-2000; 2000WO-US04342.
XX 22-FEB-2000; 2000WO-US04414.

(GETH) GENENTECH INC.

XX
XX

PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
XX
XX WPI; 2000-572271/53.
XX N-ESDB; AAC58586.
XX
XX Sixty four PRO polypeptides, useful in the diagnosis and treatment of
PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
XX
XX Claim 33; Fig 16; 309pp; English.
XX
XX The present invention describes sixty four human PRO proteins which can
CC be used in the treatment of immune related diseases. The human PRO
CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
CC treating and diagnosing immune related disorders. The disorders are
CC selected from systemic lupus erythematosus, rheumatoid arthritis,
CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
CC systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
CC anaemia, autoimmune thrombocytopenia, thyroiditis, diabetes mellitus,
CC immune-mediated renal disease, demyelinating diseases of the central
CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
CC autoimmune or immune-mediated skin diseases, allergic diseases,
CC immunological diseases of the lung, and transplantation associated
CC diseases including graft rejection and graft-versus-host-disease.
CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
CC sequences given in the exemplification of the present invention.
XX
XX Sequence 312 AA;

Query Match 83.3%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-217;

Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVSVFYVYQOTLQGFQKRAEMIDFNIRIKNVTNRDAGKYRCEVSAPEQ 96
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Db 119 QNLEEDTVTLLEVLVAPVAPVCEVPSSALSGTVVLRCDKEGNPAPEYTFWKDGIRLLEN 178
Qy 157 PRLGSQSTNSSTYTNMTKTGTLQFNVTVSKLDTGEYSCEARNISVGYRRCFGKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNVTVSKLDTGEYSCEARNISVGYRRCFGKRMQVDDLNIS 238
Qy 217 GIITAAVVVVVALVISVCGLVGYAQRKGYFSKETSFKNSNSSSKATTWSEN 266
Db 239 GIITAAVVVVVALVISVCGLVGYAQRKGYFSKETSFKNSNSSSKATTWSEN 288

RESULT 15

AAB24401

ID AAB24401 standard; Protein; 312 AA.

XX AAB24401;
XX AC

XX 07-NOV-2000 (first entry)

XX Human PRO245 protein sequence SEQ ID NO:67.

XX Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
KW cytostatic; gene therapy; vaccine.
XX
XX Homo sapiens.
OS
XX

PN WO200032221-A2.

XX PD 08-JUN-2000.

XX PF 30-NOV-1999; 99WO-US28313.

XX PR 01-DEC-1998; 98WO-US25108.

XX PR 16-DEC-1998; 98US-0112850.

XX PR 12-JAN-1999; 99US-0115554.

XX PR 08-MAR-1999; 99WO-US05028.

XX PR 12-MAR-1999; 99US-0123957.

XX PR 28-APR-1999; 99US-0131445.

XX PR 14-MAY-1999; 99US-0134287.

XX PR 02-JUN-1999; 99WO-US12252.

XX PR 23-JUN-1999; 99US-0141037.

XX PR 20-JUL-1999; 99US-0144758.

XX PR 26-JUL-1999; 99US-0145698.

XX PR 01-SEP-1999; 99WO-US20111.

XX PR 08-SEP-1999; 99WO-US20594.

XX PR 13-SEP-1999; 99WO-US20944.

XX PR 15-SEP-1999; 99WO-US21090.

XX PR 15-SEP-1999; 99WO-US21547.

XX PR 05-OCT-1999; 99WO-US23089.

XX PR 29-OCT-1999; 99US-0162506.

XX PA (GETH) GENENTECH INC.

XX PI Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;

XX PI Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;

XX PI Watanabe CK, Williams PM, Wood WI;

XX DR WPI, 2000-412154/35.

XX DR N-FSDB; AAA77562.

XX PT Nucleic acids encoding PRO polypeptides useful for preventing,

XX PT diagnosing and treating diagnosing a cardiovascular, endothelial or

XX PT angiogenic disorders in mammals -

XX PS Claim 72; Fig 28; 315pp; English.

XX CC The present invention describes nucleic acids encoding PRO polypeptides

XX CC useful for preventing, diagnosing and treating diagnosing a

XX CC cardiovascular, endothelial or angiogenic disorder in mammals by

XX CC modulating cell proliferation, angiogenesis and cardiovascularisation,

XX CC and for identifying agonists and antagonists of these processes. The

XX CC nucleic acids and the proteins they encode may be used in the

XX CC prevention, treatment and diagnosis of diseases associated with

XX CC inappropriate PRO expression such as cardiovascular, endothelial or

XX CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and

XX CC cardiac hypertrophy). For example, the nucleic acids (Ncs) and vectors

XX CC containing them and the PRO polypeptide may be used to treat disorders

XX CC associated with decreased PRO expression. AAA77510 to AAA77721 and

XX CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in

XX CC the exemplification of the present invention.

XX SQ Sequence 312 AA;

Query Match 83.3%; Score 230; DB 21; Length 312;

Best Local Similarity 100.0%; Pred. No. 2.1e-217;

Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

37 SRLEWKKLGRSVFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96

59 SRLEWKKLGRSVFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

97 QNLEEDTVTLVLVAPVPSCEVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156

119 QNLEEDTVTLVLVAPVPSCEVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

157 PRIGSOSTNNSYTMNTKTGTLOENTVSKLDGTGYSCEARNVGVRCPCGKRMQVDDLNIS 216

179 PRIGSOSTNNSYTMNTKTGTLOENTVSKLDGTGYSCEARNVGVRCPCGKRMQVDDLNIS 238

QY 217 GTIAAVVVVALVISVCGLGVCYVAAQRKGYSKTSFKNSNSSSKATTMSN 266

Db 239 GTIAAVVVVALVISVCGLGVCYVAAQRKGYSKTSFKNSNSSSKATTMSN 288

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Job time : 41.3519 secs

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; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; FILE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P1.US
; CURRENT APPLICATION NUMBER: US/09-152, 060
; CURRENT FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30

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; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

Query Match      83.3%; Score 230; DB 4; Length 312;
Best Local Similarity 100.0%; Pred. No. 4.5e-218;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db   59 SRLEWKKLGRSVSFVYQQTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY   97 QNLEEDTVTLEVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db  119 QNLEEDTVTLEVLVAPVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

QY  157 PRIGSOSTNSSYTMNTKTGTQNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 216
Db  179 PRIGSOSTNSSYTMNTKTGTQNTVSKLDTGEYSCEARNVGYRRCPCGKRMQVDDLNIS 238

QY  217 GIITAAVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSSEN 266
Db  239 GIITAAVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSSEN 288
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GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.

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Searched: 684280 seqs, 185983659 residues

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Minimum DB seq length: 0

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Post-processing: Listing first 45 summaries

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- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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3	274	99.3	298	10	US-09-852-797-76
4	240	87.0	298	9	US-09-745-763-38
5	240	87.0	298	9	US-09-799-777-30
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7	240	87.0	298	16	US-10-192-791-2
8	230	83.3	312	10	US-09-909-320-64
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11	230	83.3	312	10	US-09-953-499-9
12	230	83.3	312	10	US-09-902-853-64
13	230	83.3	312	10	US-09-907-824-64
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18	230	83.3	312	11	US-09-907-613-64
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20	230	83.3	312	11	US-09-904-859-64
21	230	83.3	312	11	US-09-909-204-64
22	230	83.3	312	11	US-09-904-820-64
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ALIGNMENTS

RESULT 1
US-09-853-161-76
; Sequence 76, Application US/09853161
; Patent No. US20020076756A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P3
; CURRENT APPLICATION NUMBER: US/09/853,161
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298

TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match 99.3%; Score 274; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAIGFSAPKDDQVAVYQEAIALACKTPKTVXSRLEWKLGSRVSFVYQOTLQGD 60
DB 23 YHKAIGFSAPKDDQVAVYQEAIALACKTPKTVXSRLEWKLGSRVSFVYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 142
QY 121 SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRLGQSOSTNSSYTMNKTGTLOFN 180
DB 143 SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRLGQSOSTNSSYTMNKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGYRCPCGKRMQVDDNLNIGIIAAVVVVVALVISVCGLGVCYQA 240
DB 203 TVSKLDTGEYSCEARNVGYRCPCGKRMQVDDNLNIGIIAAVVVVVALVISVCGLGVCYQA 262
QY 241 RKGYSKETSFOKNSNSSKATMTSENDFKHTKSFII 276
DB 263 RKGYSKETSFOKNSNSSKATMTSENDFKHTKSFII 298

RESULT 2

US-09-852-659A-76
Sequence 76, Application US/09852659A
Patent No. US20020077287A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 28 Human Secreted Proteins
FILE REFERENCE: P2003P4
CURRENT APPLICATION NUMBER: US/09/852.659A
CURRENT FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: 60/265,583
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 09/152,060
PRIOR FILING DATE: 1998-09-11
PRIOR APPLICATION NUMBER: PCT/US98/04858
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/040,762
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/040,710
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/050,934
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,100
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,357
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,189
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/057,765
PRIOR FILING DATE: 1997-09-05
PRIOR APPLICATION NUMBER: 60/048,970
PRIOR FILING DATE: 1997-06-06
PRIOR APPLICATION NUMBER: 60/068,368
PRIOR FILING DATE: 1997-12-19
NUMBER OF SEQ ID NOS: 121
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76

LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
FEATURE:
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76

Query Match 99.3%; Score 274; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAIGFSAPKDDQVAVYQEAIALACKTPKTVXSRLEWKLGSRVSFVYQOTLQGD 60
DB 23 YHKAIGFSAPKDDQVAVYQEAIALACKTPKTVXSRLEWKLGSRVSFVYQOTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSQGNLEEDTTLVLELVAPVPSCEVP 142
QY 121 SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRLGQSOSTNSSYTMNKTGTLOFN 180
DB 143 SSALSGTVVELRCODKEGNPAPEYTWFKDGIIRLLENPRLGQSOSTNSSYTMNKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGYRCPCGKRMQVDDNLNIGIIAAVVVVVALVISVCGLGVCYQA 240
DB 203 TVSKLDTGEYSCEARNVGYRCPCGKRMQVDDNLNIGIIAAVVVVVALVISVCGLGVCYQA 262
QY 241 RKGYSKETSFOKNSNSSKATMTSENDFKHTKSFII 276
DB 263 RKGYSKETSFOKNSNSSKATMTSENDFKHTKSFII 298

RESULT 3

US-09-852-797-76
Sequence 76, Application US/09852797
Patent No. US20020172994A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: 28 Human Secreted Proteins
FILE REFERENCE: P2003P2
CURRENT APPLICATION NUMBER: US/09/852.797
CURRENT FILING DATE: 2001-05-11
PRIOR APPLICATION NUMBER: 60/265,583
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 09/152,060
PRIOR FILING DATE: 1998-09-11
PRIOR APPLICATION NUMBER: PCT/US98/04858
PRIOR FILING DATE: 1998-03-12
PRIOR APPLICATION NUMBER: 60/040,762
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/040,710
PRIOR FILING DATE: 1997-03-14
PRIOR APPLICATION NUMBER: 60/050,934
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,100
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,357
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/048,189
PRIOR FILING DATE: 1997-05-30
PRIOR APPLICATION NUMBER: 60/057,765
PRIOR FILING DATE: 1997-09-05
PRIOR APPLICATION NUMBER: 60/048,970
PRIOR FILING DATE: 1997-06-06
PRIOR APPLICATION NUMBER: 60/068,368
PRIOR FILING DATE: 1997-12-19
NUMBER OF SEQ ID NOS: 118

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; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: prt
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

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1  RESULT 4
2  US-09-745-763-38
3  ; Sequence 38, Application US/09745763
4  ; Patent No. US20020065394A1
5  ; GENERAL INFORMATION:
6  ; APPLICANT: Jacobs, Kenneth
7  ; McCoy, John M.
8  ; LaVallie, Edward R.
9  ; Collins-Racie, Lisa A.
10 ; Evans, Cheryl
11 ; Merberg, David
12 ; Treacy, Maurice
13 ; Spaulding, Vikki
14 ; TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
15 ; ENCODING THEM
16 ;
17 ; NUMBER OF SEQUENCES: 219
18 ; CORRESPONDENCE ADDRESS:
19 ; ADDRESSEE: Genetics Institute, Inc.
20 ; STREET: 87 Cambridgepark Drive
21 ; CITY: Cambridge
22 ; STATE: MA
23 ; COUNTRY: U.S.A.
24 ; ZIP: 02140
25 ;
26 ; COMPUTER READABLE FORM:
27 ; MEDIUM TYPE: Floppy disk
28 ; COMPUTER: IBM PC compatible
29 ; OPERATING SYSTEM: PC-DOS/MS-DOS
30 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
31 ;
32 ; CURRENT APPLICATION DATA: US/09/745,763
33 ; APPLICATION NUMBER: US/09/745,763
34 ; FILING DATE: 18-Jun-2000
35 ; CLASSIFICATION: <Unknown>
36 ; ATTORNEY/AGENT INFORMATION:
37 ; NAME: Sprunger, Suzanne A.

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;      REGISTRATION NUMBER: 41,323
;      TELECOMMUNICATION INFORMATION:
;      TELEPHONE: (617) 498-8284
;      TELEFAX: (617) 876-5851
;      INFORMATION FOR SEQ ID NO: 38:
;      SEQUENCE CHARACTERISTICS:
;      LENGTH: 298 amino acids
;      TYPE: amino acid
;      STRANDEDNESS: <Unknown>
;      TOPOLOGY: linear
;      MOLECULE TYPE: protein
;      SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

      Query Match      87.0%; Score 240; DB 9; Length 298;
      Best Local Similarity 100.0%; Pred.No. 9.2e-227;
      Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      37  SRLEWKKLGRSVFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 96
      |||||
Db      59  SRLEWKKLGRSVFVYYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
      |||||

Qy      97  QNLBEDTVTLVLVAPAVSPCEVPSSALSGTVVVELRCQDKEGNPAPETWFKOGIRLLEN 156
      |||||
Db      119 QNLBEDTVTLVLVAPAVSPCEVPSSALSGTVVVELRCQDKEGNPAPETWFKOGIRLLEN 178
      |||||

Qy      157 PRLGSGSTNSSYTMNTKTGTLPQNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNIS 216
      |||||
Db      179 PRLGSGSTNSSYTMNTKTGTLPQNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNIS 238
      |||||

Qy      217 GIIAAVVVVALVISVCLGVCYAQRKGYSFKETSFOKSNSSSSKATTMSENDFKHTKSFI 276
      |||||
Db      239 GIIAAVVVVALVISVCLGVCYAQRKGYSFKETSFOKSNSSSSKATTMSENDFKHTKSFI 298
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TELEPHONE: (650) 855-0555
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: DUODNOT02
CLONE: 1704050
SEQUENCE DESCRIPTION: SEQ ID NO: 30 :
US-09-799-777-30
Query Match 87.0%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 37 SRLEWKLGSRVSFVYQOTLQGDGPKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKLGSRVSFVYQOTLQGDGPKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
Qy 97 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
Qy 157 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 238
Qy 217 GIILAAVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTTMSDNDFKHTKSFII 276
Db 239 GIILAAVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTTMSDNDFKHTKSFII 298

RESULT 6
US-10-139-849-2
; Sequence 2, Application US/10139849
; Publication No. US20030079239A1
; GENERAL INFORMATION:
; APPLICANT: Cunningham, Sonia
; Barros, Maria Pia
; TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN
; JUNCTIONAL ADHESION PROTEIN (JAM 2)
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Rocket, Milnamow & Katz, Ltd.
; STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
; Suite 4700
; CITY: Chicago
; STATE: IL
; COUNTRY: U.S.A.
; ZIP: 60601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: 07-May-2002
; APPLICATION NUMBER: US/10/139,849
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/643,929
; FILING DATE: 23-Aug-2000
; ATTORNEY/AGENT INFORMATION:
; NAME: Katz, Martin L.
; REGISTRATION NUMBER: 25,011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-616-5400
; TELEFAX: 312-616-5460
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:

LENGTH: 298 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2
Query Match 87.0%; Score 240; DB 15; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 37 SRLEWKLGSRVSFVYQOTLQGDGPKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKLGSRVSFVYQOTLQGDGPKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
Qy 97 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
Qy 157 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 216
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Qy 217 GIILAAVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTTMSDNDFKHTKSFII 276
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RESULT 7
US-10-192-791-2
; Sequence 2, Application US/10192791
; Publication No. US20030130166A1
; GENERAL INFORMATION:
; APPLICANT: Texas Biotechnology Corporation
; TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
; FILE REFERENCE: TEX4542P0430
; CURRENT APPLICATION NUMBER: US/10/192,791
; CURRENT FILING DATE: 2003-12-10
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 2
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-192-791-2
Query Match 87.0%; Score 240; DB 16; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 37 SRLEWKLGSRVSFVYQOTLQGDGPKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKLGSRVSFVYQOTLQGDGPKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
Qy 97 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDVTLEVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
Qy 157 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTLQFNTVSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 238
Qy 217 GIILAAVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTTMSDNDFKHTKSFII 276
Db 239 GIILAAVVVALVISVCGLGVCYAKRGYFSKETSFKQSNSSSKATTTMSDNDFKHTKSFII 298

RESULT 8
US-09-909-320-64
; Sequence 64, Application US/09909320
; Patent No. US20020132240A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.

APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,320
CURRENT FILING DATE: 2002-01-04
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 64
LENGTH: 312
TYPE: PRT
ORGANISM: Homo sapiens
US-09-909-320-64

Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSVFYOOTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEOG 96
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
59 SRLEWKKLGRSVSVFYOOTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEOG 118
QY 97 QNLEEDTTLVLVAPVPSPCEVPSSALSGTGVVLRCDKEGNPAPEYTMFKDGRLLN 156
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
119 QNLEEDTTLVLVAPVPSPCEVPSSALSGTGVVLRCDKEGNPAPEYTMFKDGRLLN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCARNVGYRRCPCGRMQVDDLNS 216
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
179 PRLGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCARNVGYRRCPCGRMQVDDLNS 238
QY 217 GIIAAVVVVALVISVGLGVCYAOQKGYFSKETSFOKSNSSSKATTMSN 266
Db ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
239 GIIAAVVVVALVISVGLGVCYAOQKGYFSKETSFOKSNSSSKATTMSN 288

RESULT 9

US-09-909-088B-64
; Sequence 64, Application US/09909088B
; Patent No. US20020146709A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,088B
CURRENT FILING DATE: 2001-07-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29

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; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1998-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQG 96
Db 59 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQG 118

Qy 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTTVELRCQDKEGNPAPEYTFWFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTTVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178

Qy 157 PRLGQSSTNSSTYTNKTKGTQFNVTSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 216
Db 179 PRLGQSSTNSSTYTNKTKGTQFNVTSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 238

Qy 217 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 266
Db 239 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288
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RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
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; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; PRIOR FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64
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Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQG 96
Db 59 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQG 118

Qy 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTTVELRCQDKEGNPAPEYTFWFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTTVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178

Qy 157 PRLGQSSTNSSTYTNKTKGTQFNVTSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 216
Db 179 PRLGQSSTNSSTYTNKTKGTQFNVTSKLDTGEYSCEARNVGVYRRCPCGKRMQVDDLNIS 238

Qy 217 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 266
Db 239 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFOKSNSSSKATTMSEN 288
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RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
```

```

; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; TITLE OF INVENTION: OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; PRIOR FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US/09/254,465
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      37  SRLKWKLLGRSVSFVYVYQOTLQGDFFKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
DB      59  SRLKWKLLGRSVSFVYVYQOTLQGDFFKRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118

QY      97  QNLBEDVTTLVVLVAPVPSCVVPSSALSGTVVWELRCODKEGNPAPEYTWFKDGIIRLEN 156
DB     119  QNLBEDVTTLVVLVAPVPSCVVPSSALSGTVVWELRCODKEGNPAPEYTWFKDGIIRLEN 178

QY     157  PRLGQSQTNSYTNMTKTGTLQFNVTSKLDTGTEYSCAARNVGYRRCPCGKMWQVDLNLIS 216
DB     179  PRLGQSQTNSYTNMTKTGTLQFNVTSKLDTGTEYSCAARNVGYRRCPCGKMWQVDLNLIS 238

QY     217  GI1AAVVVVVALVISVCGLGVCYAQRKGYSKETSFKQSNSSSKATTWSEN 266
DB     239  GI1AAVVVVVALVISVCGLGVCYAQRKGYSKETSFKQSNSSSKATTWSEN 288

RESULT 12
US-09-902-853-64
; Sequence 64, Application US/09902853
; Publication No. US20020192659A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James

```

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RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; PRIOR FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; PRIOR FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64
Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFYVYQOTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEOG 96
Db 59 SRLEWKKLGRSVSFYVYQOTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCVSPSEOG 118
QY 97 ONLEBDTTLVLVAPVPSPSSALSGTWELRCQKGNPAPEXTWFKDGIURLLEN 156
Db 119 ONLEBDTTLVLVAPVPSPSSALSGTWELRCQKGNPAPEXTWFKDGIURLLEN 178
QY 157 PRLGSQSTNSSTYTNMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRRCFCGRMQVDDLNIS 216
Db 179 PRLGSQSTNSSTYTNMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRRCFCGRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLGVCYQAQRKGYFSKETSFKQKSNSSSKATTMSN 266
Db 239 GIIAAVVVVALVISVCGLGVCYQAQRKGYFSKETSFKQKSNSSSKATTMSN 288

; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; PRIOR FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
```


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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:33:14 ; Search time 13.4634 Seconds
(without alignments)
1971.458 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276
Sequence: 1 YHKAYGFSAPKDDQVVTVX.....SSKATTMSSEDFKHTKSPFI 276

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 283308 seqs, 96168682 residues

Word size : 30

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : PIR_76:*

1: pir1:★

```
2: pir2: *
```

3: pir3: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	100	100	100	1	...
2	95	95	95	2	...
3	90	90	90	3	...
4	85	85	85	4	...
5	80	80	80	5	...
6	75	75	75	6	...
7	70	70	70	7	...
8	65	65	65	8	...
9	60	60	60	9	...
10	55	55	55	10	...
11	50	50	50	11	...
12	45	45	45	12	...
13	40	40	40	13	...
14	35	35	35	14	...
15	30	30	30	15	...
16	25	25	25	16	...
17	20	20	20	17	...
18	15	15	15	18	...
19	10	10	10	19	...
20	5	5	5	20	...

No matches found

Search completed: December 9, 2003, 17:38:32
Job time : 14.4634 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:26:43 ; Search time 9.61672 Seconds
(without alignments)
1349.666 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 YHKAYGFSAPKQDQWTVAVX.....SSKATTWSEDFKHTKSFII 276

Scoring table:

OLIGO Gapop 60.0 , Gapext 60.0

Searched: 127863 seqs, 47026705 residues

Word size : 30

Total number of hits satisfying chosen parameters: 1

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : SwissProt_41:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	240	87.0	298	1	JAM2_HUMAN P57087 homo sapien

ALIGNMENTS

RESULT 1

ID	Score	Query Match	Length	ID	Description
JAM2_HUMAN					
AC P57087					
DT 16-OCT-2001 (Rel. 40, Created)					
DT 16-OCT-2001 (Rel. 40, Last sequence update)					
DT 15-SEP-2003 (Rel. 42, Last annotation update)					
DE Junctional adhesion molecule 2 precursor (Vascular endothelial					
DE Junction-associated molecule) (VE-JAM).					
GN JAM2 OR VEJAM OR C21ORP43.					
OS Homo sapiens (Human).					
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;					
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.					
OX NCBI_TaxID=9606;					
RN [1]					
RP SEQUENCE FROM N.A.					
RC TISSUE=Vascular endothelial cells;					
RX MEDLINE=20317114; PubMed=10779521;					
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;					
RT "Vascular endothelial junction-associated molecule, a novel member of					
RT the immunoglobulin superfamily, is localized to intercellular					
RL boundaries of endothelial cells."					
RL J. Biol. Chem. 275:19139-19145(2000).					
[2]					
RP SEQUENCE FROM N.A.					
RC TISSUE=Placenta;					
RX MEDLINE=20507930; PubMed=10945976;					

BA Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjercke R.J.,
RA Vanderslice P., Morris A.P., Brock T.A.;
RT "A novel protein with homology to the functional adhesion molecule:
RL Characterization of leukocyte interactions";
RN J. Biol. Chem. 275:34750-34756(2000).
[3]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalilus D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
human and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
CC -!- FUNCTION: MAY PLAY A ROLE IN THE PROCESSES OF LYMPHOCTE HOMING TO
CC SECONDARY LYMPHOID ORGANS.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (Potential).
CC -!- TISSUE SPECIFICITY: PROMINENTLY EXPRESSED ON HIGH ENDOTHELIAL
CC VENULES BUT IS ALSO PRESENT ON THE ENDOTHELIA OF OTHER VESSELS.
CC LOCALIZED TO THE INTERCELLULAR BOUNDARIES OF HIGH ENDOTHELIAL
CC CELLS.
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC -!- DATABASE: NAME=PROV; NOTE=PROV 2:1-3(2001);
CC WWW="http://www.ncbi.nlm.nih.gov/prov/guide/1652492186.g.htm".

CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).

CC EMBL; AF255910; AAF81223.1; -;
CC EMBL; AY016009; AAG49022.1; -;
CC EMBL; BC017779; AAH17779.1; -;
CC Genew; HGNC:14686; JAM2.
CC MIN; 606870; -;
CC GO; GO:0005887; C:integral to plasma membrane; NAS.
CC GO; GO:0016337; P:cell-cell adhesion; NAS.
CC InterPro; IPR007110; Ig-like.
CC InterPro; IPR003598; Ig_c2.
CC InterPro; IPR003006; Ig_MHC.
CC Pfam; PF00047; Ig; 2.
CC SMART; SM00408; Igc2; 1.
CC PROSITE; PS50835; IG-LIKE; 2.
CC Immunoglobulin domain; Glycoprotein; Transmembrane; Signal.
KW SIGNAL 1 20
FT CHAIN 21 298 JUNCTIONAL ADHESION MOLECULE 2.
FT DOMAIN 21 238 EXTRACELLULAR (POTENTIAL).
FT TRANSMEM 239 259 POTENTIAL.
FT DOMAIN 260 298 CYTOPLASMIC (POTENTIAL).
FT DOMAIN 32 127 IG-LIKE V-TYPE.
FT DOMAIN 134 238 IG-LIKE C2-TYPE.
FT DISULFID 50 109 POTENTIAL.
FT DISULFID 155 214 POTENTIAL.

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FT CARBOHYD 98 98 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 187 187 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 236 236 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 298 AA; 33207 MW; CA78B518E22DCABE CRC64;

Query Match      87.0%; Score 240; DB 1; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.6e-232;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
   |||||||
Db 59 SRLEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
   |||||||

QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 156
   |||||||
Db 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTFWFKDGIRLLEN 178
   |||||||

QY 157 PRLGQSSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNIS 216
   |||||||
Db 179 PRLGQSSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNSVGYRRCPGKRMQVDDLNIS 238
   |||||||

QY 217 GIIAAVVVVALVISVGLGVCYQAQRKGYPFSKETSFQKSNSSSKATTMSSEDPKHTKSFII 276
   |||||||
Db 239 GIIAAVVVVALVISVGLGVCYQAQRKGYPFSKETSFQKSNSSSKATTMSSEDPKHTKSFII 298
   |||||||
```

Search completed: December 9, 2003, 17:36:26
Job time : 9.61672 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:32:33 ; Search time 35.101 Seconds
(without alignments)
2029.071 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 YKAYGFSAPKDDQWVTAVX.....SSKATTMSSEDFKHTKSFII 276

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 830525 seqs, 258052604 residues

Word size: 30

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

- Database : SPTREMBL_23:**
- 1: sp_archaea:*
- 2: sp_bacteria:*
- 3: sp_fungi:*
- 4: sp_human:*
- 5: sp_invertebrate:*
- 6: sp_mammal:*
- 7: sp_mhc:*
- 8: sp_organelle:*
- 9: sp_phage:*
- 10: sp_plant:*
- 11: sp_rodent:*
- 12: sp_virus:*
- 13: sp_vertebrate:*
- 14: sp_unclassified:*
- 15: sp_rvirus:*
- 16: sp_bacteriap:*
- 17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query Match	Score	Length	DB ID	Description

No matches found

Search completed: December 9, 2003, 17:38:06

Job time : 35.101 secs


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PR 30-MAY-1997; 97US-0048189.
PR 30-MAY-1997; 97US-0048357.
PR 30-MAY-1997; 97US-0050934.
PR 06-JUN-1997; 97US-0048970.
PR 05-SEP-1997; 97US-0057765.
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Ferrie AM, Fischer CL, Gentz RL, Greene JM, Kyaw H;
PI Li H, Li Y, Moore PA, Rosen CA, Ruben SM, Soppet DR;
PI Wei YF, Young PE, Zeng Z;
XX WPI; 1998-520811/44.
DR N-PSDB; AAV34310.
XX
XX Isolated human poly.nucleotide(s) encoding secretory peptide(s) -
PT used to develop products for the diagnosis and treatment of e.g.
PT inflammation, cancers, CNS disorders or immune system disorders
XX
XX Claim 1; Page 168-169; 201pp; English.
XX
XX This sequence represents a secreted human protein encoded by the gene
CC clone detailed in the descriptor line. The gene can be used to generate
CC fusion proteins by linking to the gene to a human immunoglobulin Fc
CC portion (e.g. AAV34277) for increasing the stability of the fused
CC protein as compared to the human protein only.
CC The invention relates to 28 novel genes and their fragments (nucleic
CC acid sequences: AAV34286-V34325; amino acid sequences AAW5196-W5235)
CC which are useful for preventing, treating or ameliorating medical
CC conditions e.g. by protein or gene therapy. Also, pathological
CC conditions can be diagnosed by determining the amount of the new
CC polypeptides in a sample or by determining the presence of mutations in
CC the new polynucleotides. Specific uses are described for each of the 28
CC polynucleotides, based on which tissues they are most highly expressed in
CC (see AAV34286 for described uses).
XX
XX SQ Sequence 298 AA;
XX
XX Query Match 99.3%; Score 274; DB 19; Length 298;
XX Best Local Similarity 100.0%; Pred. No. 1.2e-260;
XX Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
Qy 1 YHKAYGFSAPKQDQVAVYQAEAILACKTPKKTVXSRLWKLGSRVSFVYQQTIGQD 60
Db 23 YHKAYGFSAPKQDQVAVYQAEAILACKTPKKTVXSRLWKLGSRVSFVYQQTIGQD 82
Qy 61 FKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSQGNLEEDTTLVLVAVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSQGNLEEDTTLVLVAVAPVPSCEVP 142
Qy 121 SSALSGTVVELRCODKEGNPAPEYTWFKDGIRLLENPRLGQSQTNSSTYTNKTKGTLOFN 180
Db 143 SSALSGTVVELRCODKEGNPAPEYTWFKDGIRLLENPRLGQSQTNSSTYTNKTKGTLOFN 202
Qy 181 TVSKLDTGECSEARNVGYRCRGMQVDDNLNIGIIAAVVVALVISVCGLGVCYQAQ 240
Db 203 TVSKLDTGECSEARNVGYRCRGMQVDDNLNIGIIAAVVVALVISVCGLGVCYQAQ 262
Qy 241 RKGYSKETSFKNSSSKATTWSEDFKTKSFII 276
Db 263 RKGYSKETSFKNSSSKATTWSEDFKTKSFII 298
XX
XX RESULT 2
XX ID AAE26983
XX AC AAE26983 standard; Protein; 298 AA.
XX AC AAE26983;
XX
XX 13-DEC-2002 (first entry)
XX
XX Human gene 25 encoded secreted protein HTEEB42, SEQ ID NO:76.
XX

```

```

KW Human; immunodeficiency; X-linked agammaglobulinaemia; septic shock;
KW autoimmune disorder; rheumatoid arthritis; multiple sclerosis; cancer;
KW Grave's disease; diabetes mellitus; haematopoietic disorder; stroke;
KW respiratory disorder; asthma; allergy; gastrointestinal disorder;
KW inflammatory bowel disease; neurodegenerative disorder; hepatitis;
KW Parkinson's disease; Alzheimer's disease; cardiovascular disorder;
KW atherosclerosis; myocarditis; renal disorder; fungicide; virucide;
KW hyperproliferative disorder; acute glomerulonephritis; consilitis;
KW respiratory disorder; rhinitis; sinusitis; neurological disease;
KW endocrine disorder; Addison's disease; reproductive system disorder;
KW endometriosis; vasotropic; vulnary; cytostatic; nootropic; cardiant;
XX anti-HIV; tranquilliser; gout; antiparasitic.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Peptide 1..22 /label= Signal_peptide
XX Protein 23..298
XX /note= "Human mature secreted protein"
XX
XX Misc-difference 42 /label= Unknown
XX /note= "Encoded by GWG"
XX
XX Misc-difference 58 /label= Unknown
XX /note= "Encoded by TSC"
XX
XX US2002077287-A1.
XX
XX 20-JUN-2002.
XX
XX 11-MAY-2001; 2001US-0852659.
XX
XX 11-SEP-1998; 98US-0152060.
XX
XX (RUBE/) RUBEN S M.
XX (ROSE/) ROSEN C A.
XX (LIYU/) LI Y.
XX (ZENG/) ZENG Z.
XX (KYAW/) KYAW H.
XX (FISC/) FISCHER C L.
XX (LIHH/) LI H.
XX (SOPP/) SOPPET D R.
XX (GENT/) GENTZ R L.
XX (WEIY/) WEI Y.
XX
XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
XX Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
XX Ferrie AM;
XX
XX WPI; 2002-598780/64.
XX N-PSDB; AAD44660.
XX
XX Novel human secreted polypeptides and polynucleotides for diagnosing,
XX preventing, treating immune hyperproliferative, cardiovascular,
XX neurological, reproductive disorders and identifying modulators of
XX therapeutic use
XX
XX Claim 11; Page 186; 209pp; English.
XX
XX AAD44636-AAD44676 represent cDNAs corresponding to 28 human secreted
XX protein genes, and AAE26959-AAE26999 represent the proteins they encode.
XX AAE27000-AAE27025 represent human secreted protein fragments or their
XX variants. The secreted proteins and genes are useful for preventing,
XX treating or ameliorating medical conditions, e.g., by protein or gene
XX therapy. Specific uses are described for each of the 28 genes, based
XX on the tissues in which they are most highly expressed and include
XX developing products for the diagnosis or treatment of immunodeficiencies,
XX e.g., X-linked agammaglobulinaemia, B cell immunodeficiencies, severe
XX combined immunodeficiencies, autoimmune disorders e.g., systemic lupus
XX erythematosus, rheumatoid arthritis, multiple sclerosis, autoimmune
XX thyroiditis, autoimmune haemolytic anaemia, Goodpasture's syndrome,
XX Grave's disease, diabetes mellitus, dermatitis, inflammatory conditions
XX

```

CC including septic shock, sepsis, reperfusion injury, inflammatory bowel
 CC disease, Crohn's disease, haematopoietic disorders, respiratory
 CC disorders e.g., asthma and allergy, gastrointestinal disorders e.g.,
 CC inflammatory bowel disease), cancers e.g., gastric, ovarian, lung,
 CC liver, bladder and breast), central nervous system (CNS) disorders e.g.,
 CC ischaemic brain injury and/or stroke, neurodegenerative disorders e.g.,
 CC Parkinson's disease and Alzheimer's disease, AIDS-related dementia and
 CC prion disease, cardiovascular disorders e.g., myocarditis, arrhythmias,
 CC atherosclerosis, inflammatory disorders e.g., hepatitis, gout, trauma,
 CC pancreatitis, sarcoidosis and allogeneic transplant rejection, blood-
 CC related disorder (thrombosis, arterial thrombosis, atherosclerosis),
 CC hyperproliferative disorders, respiratory disorders e.g. rhinitis,
 CC sinusitis, tonsillitis, lung cancer, allergic disorders, pneumonitis,
 CC renal disorders. e.g. acute glomerulonephritis, neurological diseases,
 CC liver disorders, endocrine disorders e.g., hyperthyroidism, Addison's
 CC disease, hyperpituitarism, infectious diseases and reproductive system
 CC disorders e.g. endometriosis. The present sequence represents a human
 CC secreted protein of the invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260; Mismatches 0; Indels 0; Gaps 0;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVAVXQYQAEILACKTPKTKVXSRLEWKLGSRVSFVYQQTLOGD 60
 DB 23 YHKAYGFSAPKDDQVVAVXQYQAEILACKTPKTKVXSRLEWKLGSRVSFVYQQTLOGD 82

QY 61 FKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSGQGNLEEDTTLVLVAVAPVPSCEVP 120
 DB 83 FKNRAEMIDFNIRIKNTRSDAGKYRCEVSAPSGQGNLEEDTTLVLVAVAPVPSCEVP 142

QY 121 SSALSGTIVELRCODKGNPAPEYTFWFKDGRLLLENPRLGSGQSTNSSTYTKTKTGLQFN 180
 DB 143 SSALSGTIVELRCODKGNPAPEYTFWFKDGRLLLENPRLGSGQSTNSSTYTKTKTGLQFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIAAVVVVVALVISVCGLGVCYQAQ 262

QY 241 RKGYSFKTSFQKSNSSKATMTSENDFKHTKSPII 276
 DB 263 RKGYSFKTSFQKSNSSKATMTSENDFKHTKSPII 298

RESULT 3
 AAE27121
 ID AAE27121 standard; Protein; 298 AA.
 AC AAE27121;
 XX
 XX 13-DEC-2002 (first entry)
 DT Human gene 25 encoded secreted protein HTBEB42, SEQ ID NO:76.
 XX
 DE Human; secreted protein; autoimmune disease; hyperproliferative disorder;
 KW rheumatoid arthritis; neoplasm; cerebrovascular disorder; angiogenesis;
 KW cerebral ischaemia; cardiovascular disorder; nervous system disorder;
 KW cardiac arrest; Alzheimer's disease; ocular disorder; wound healing;
 KW infection; corneal infection; skin aging; food additive; preservative;
 KW tissue regeneration; immunosuppressive; antiproliferative; cytostatic;
 KW cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective;
 KW antibacterial; virucide; fungicide; ophthalmological; gene therapy;
 KW vulnery.

OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FH Peptide 1..22
 FT /label= Signal_peptide
 FT 23..298
 FT Protein /notes= "Mature human secreted protein"

FT Misc-difference 42 /label= Unknown
 FT /note= "Encoded by GWG"
 FT Misc-difference 58 /label= Unknown
 FT /note= "Encoded by TSC"
 XX US2002076756-A1.
 XX 20-JUN-2002.
 XX 11-MAY-2001; 2001US-0853161.
 XX 02-FEB-2001; 2001US-265583P.
 XX (RUBE// RUBEN S M.
 XX (ROSE// ROSEN C A.
 XX (LIYY// LI Y.
 XX (ZENG// ZENG Z.
 XX (KYAW// KYAW H.
 XX (FISC// FISCHER C L.
 XX (LIHH// LI H.
 XX (SOPP// SOPPET D R.
 XX (GENT// GENTZ R L.
 XX (WEIY// WEI Y.
 XX (MOOR// MOORE P A.
 XX (YOUN// YOUNG P E.
 XX (GREE// GREENE J M.
 XX (FERR// FERRIE A M.
 XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 XX Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 XX Ferrie AM;
 XX WPI; 2002-574454/61.
 XX N-PSDB; AAD44878.
 XX New nucleic acid molecules encoding 28 human secreted proteins, useful
 XX for diagnosing, preventing, treating or ameliorating medical conditions
 XX and as food additives or preservatives -
 XX Claim 11; Page 186-187; 209pp; English.
 XX AAD44854-AA044984 represent cDNAs corresponding to 23 human secreted
 XX protein genes, and AAE27097-AAE27137 represent the proteins they encode.
 XX AAE27138-AAE27164 represent human secreted protein fragments. The genes
 XX and their corresponding secreted proteins are useful for preventing,
 XX treating or ameliorating medical conditions, e.g., by protein or gene
 XX therapy. Secreted protein sequences of the invention are useful for the
 XX diagnosis or treatment of disorders such as autoimmune diseases (e.g.
 XX rheumatoid arthritis), hyperproliferative disorders (e.g. neoplasms of
 XX the breast or liver), cerebrovascular disorders (e.g. cerebral ischaemia,
 XX angiogenesis), cardiovascular disorders (e.g. cardiac arrest), nervous
 XX system disorders (e.g. Alzheimer's disease), infections caused by fungi,
 XX bacteria and viruses and ocular disorders (e.g. corneal infection). The
 XX polypeptides can also be used to aid wound healing and epithelial cell
 XX proliferation, to prevent skin aging due to sunburn, to maintain organs
 XX before transplantation, for supporting cell culture, to maintain organs
 XX to regenerate tissues and in chemotaxis. They can also be used as food
 XX additives or preservative to increase or decrease storage capabilities,
 XX fat content, lipid, protein, carbohydrate, vitamins, minerals, cofactors
 XX and other nutritional components. The present sequence represents a human
 XX secreted protein of the invention.

XX SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260; Mismatches 0; Indels 0; Gaps 0;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVAVXQYQAEILACKTPKTKVXSRLEWKLGSRVSFVYQQTLOGD 60
 DB 23 YHKAYGFSAPKDDQVVAVXQYQAEILACKTPKTKVXSRLEWKLGSRVSFVYQQTLOGD 82

QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSPSEOGQNLLEDVTVLEVLVAPVPSCEVP 120
 DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSPSEOGQNLLEDVTVLEVLVAPVPSCEVP 142
 QY 121 SSALSGTIVVELRCQDKEGNPAPEYTFWKDGIIRLLENPRLGSGQSTNSSTYMTKTGTLOFN 180
 DB 143 SSALSGTIVVELRCQDKEGNPAPEYTFWKDGIIRLLENPRLGSGQSTNSSTYMTKTGTLOFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIIAAVVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIIAAVVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSKTSFQKSNSSSKATMTSENDFKHTKSFII 276
 DB 263 RKGYSKTSFQKSNSSSKATMTSENDFKHTKSFII 298

RESULT 4

ABR47926
 ID ABR47926 standard; Protein; 298 AA.

XX ABR47926;

DT 12-JUN-2003 (first entry)

XX Human secreted protein, SEQ ID 817.

XX Cardiant; antiarrhythmic; antiarteriosclerotic; vasotropic; cytostatic;
 KW vulnery; antiinflammatory; nootropic; neuroprotective;
 KW antiparkinsonian; gene therapy; human; cardiovascular disorder.

XX Homo sapiens.

XX WO200295010-A2.

XX 28-NOV-2002.

XX 19-MAR-2002; 2002WO-US09785.

XX 21-MAR-2001; 2001US-277340P.

XX 19-JUL-2001; 2001US-306171P.

XX 13-NOV-2001; 2001US-331287P.

XX (HUMA-) HUMAN GENOME SCI INC.

XX Roen CA, Ruben SM;

XX WPI; 2003-129429/12.

XX Novel human secreted proteins, useful for detecting, preventing,

PT diagnosing, prognosticating, treating and/or ameliorating

PT cardiovascular disorders such as arrhythmia -

XX Claim 13; SEQ ID 817; 1881pp; English.

XX The present invention relates to novel human secreted proteins
 CC (ABR47633-ABR48145) and their coding sequences (ACC50344-ACC50856). The
 CC proteins and their coding sequences are useful for the preparation of a
 CC diagnostic or pharmaceutical composition for diagnosing or treating a
 CC cardiovascular disorder (e.g., arrhythmia, tachycardia, cardiac arrest,
 CC coronary arteriosclerosis and myocardial ischaemia), neural disorders,
 CC immune system disorders, muscular disorders, reproductive disorders,
 CC gastrointestinal disorders, pulmonary disorders, renal disorders,
 CC proliferative disorders and/or cancerous diseases and conditions, for
 CC wound healing and epithelial cell proliferation, to treat inflammation or
 CC infection, for treating thrombosis and arteriosclerosis, for treating or
 CC preventing neural damage which occurs in neuronal disorders or
 CC neurodegenerative conditions such as Alzheimer's disease and Parkinson's
 CC disease, to enhance bone and periodontal regeneration and aid in tissue
 CC transplants or bone grafts, to prevent skin aging or hair loss, to
 CC stimulate growth and differentiation of haematopoietic cells and bone
 CC marrow cells when used in combination with other cytokines, to maintain

CC organs before transplantation or for supporting cell culture of primary
 CC tissues, to increase or decrease differentiation or proliferation of
 CC embryonic stem cells, or to modulate mammalian characteristics or
 CC metabolism.

CC Note: The sequence data for this patent was published in electronic
 CC format and is available from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences.

SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 24; Length 298;

Best Local Similarity 100.0%; Pred. No. 1.2e-260;

Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 YHKAYGFSAPKDDQVVTAVYQEAAILACKTKPKTVXSRLEWKLGSRVSFVYYQOTLQGD 60

DB 23 YHKAYGFSAPKDDQVVTAVYQEAAILACKTKPKTVXSRLEWKLGSRVSFVYYQOTLQGD 82

QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSPSEOGQNLLEDVTVLEVLVAPVPSCEVP 120

DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSPSEOGQNLLEDVTVLEVLVAPVPSCEVP 142

QY 121 SSALSGTIVVELRCQDKEGNPAPEYTFWKDGIIRLLENPRLGSGQSTNSSTYMTKTGTLOFN 180

DB 143 SSALSGTIVVELRCQDKEGNPAPEYTFWKDGIIRLLENPRLGSGQSTNSSTYMTKTGTLOFN 202

QY 181 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIIAAVVVALVISVCGLGVCYQAQ 240

DB 203 TVSKLDTGEYSCEARNVGYRRCPCGRMQVDDNLISGIIIAAVVVALVISVCGLGVCYQAQ 262

QY 241 RKGYSKTSFQKSNSSSKATMTSENDFKHTKSFII 276

DB 263 RKGYSKTSFQKSNSSSKATMTSENDFKHTKSFII 298

RESULT 5

ABU64994

ID ABU64994 standard; Protein; 298 AA.

XX AC ABU64994;

XX 15-MAY-2003 (first entry)

XX Human secreted protein gene 25, protein.

XX Secreted protein; immunodeficiency; multiple sclerosis;

KW severe combined immunodeficiency; autoimmune disorder; cancer;

KW rheumatoid arthritis; diabetes mellitus; haematopoietic disorder;

KW inflammatory condition; septic shock; inflammatory bowel disease;

KW Crohn's disease; respiratory disorder; asthma; allergy; stroke;

KW gastrointestinal disorder; central nervous system disorder;

KW ischaemic brain injury; neurodegenerative disorder; Parkinson's disease;

KW Alzheimer's disease; cardiovascular disorder; atherosclerosis;

KW blood-related disorder; thrombosis; atherosclerosis; renal disorder;

KW hyperproliferative disorder; acute glomerulonephritis; Addison's disease;

KW endocrine disorder; liver disease; reproductive system disorder;

KW endometriosis; infectious disease; pancreatic disorder; vaccine;

KW wound repair; angiogenesis; lymphatic disorder; hair loss; body weight;

KW body height; hair colour; human.

OS Homo sapiens.

XX US2002172994-A1.

XX 21-NOV-2002.

XX 11-MAY-2001; 2001US-0852797.

XX 14-MAR-1997; 97US-040710P.

XX 14-MAR-1997; 97US-040762P.

XX 30-MAY-1997; 97US-048100P.

XX 30-MAY-1997; 97US-048189P.

XX 30-MAY-1997; 97US-048357P.

PR 30-MAY-1997; 97US-050934P.
 PR 06-JUN-1997; 97US-048970P.
 PR 05-SEP-1997; 97US-057765P.
 PR 19-DEC-1997; 97US-068368P.
 PR 02-FEB-2001; 2001US-265583P.
 PR 12-MAR-1998; 98WO-US04858.
 PR 11-SEP-1998; 98US-0152060.
 XX (RUBE/) RUBEN S M.
 PA (ROSE/) ROSEN C A.
 PA (LIYI/) LI Y.
 PA (ZENG/) ZENG Z.
 PA (KYAW/) KYAW H.
 PA (FISCHER/) FISCHER C L.
 PA (LIH/) LI H.
 PA (SOPPE/) SOPPE D R.
 PA (GENTZ R L.)
 PA (WEIY/) WEI Y.
 PA (MOOR/) MOORE P A.
 PA (YOUNG/) YOUNG P E.
 PA (GREENE/) GREENE J M.
 PA (FERRI/) FERRIE A M.
 XX Ruben SM, Rosen CA, Li Y, Zeng Z, Kyaw H, Fischer CL, Li H;
 PI Soppet DR, Gentz RL, Wei Y, Moore PA, Young PE, Greene JM;
 PI Ferrie AM;
 XX WPI: 2003-310989/30.
 DR N-PSDB; ABX96990.
 XX
 XX New human secreted polypeptides and polynucleotides for diagnosing,
 PT prognosing, preventing and treating immune, hyperproliferative, liver,
 PT kidney, reproductive disorders and for identifying modulators of
 PT therapeutic use -
 XX
 PS Claim 11; Page 186; 209pp; English.
 XX
 XX The invention relates to an isolated polypeptide comprising an amino acid
 CC sequence at least 95% identical to sequence of 28 human secreted
 CC proteins, their fragment, polypeptide domain, epitope, secreted form,
 CC variant, allelic variant, or species homologue, or the encoded sequence
 CC included in ATCC 97921 and 97922. Also included are the encoding
 CC nucleic acids, recombinant vectors, host cells, antibodies, and genes.
 CC The proteins and nucleic acids are useful for diagnosing, preventing,
 CC treating, prognosing or ameliorating a medical condition e.g.
 CC immunodeficiencies (e.g. X-linked agammaglobulinemia, B cell
 CC immunodeficiencies, severe combined immunodeficiencies), autoimmune
 CC disorders (e.g. systemic erythematous, rheumatoid arthritis, multiple
 CC sclerosis, autoimmune thyroiditis, autoimmune haemolytic anaemia,
 CC Goodpasture's syndrome, Grave's disease, diabetes mellitus, dermatitis),
 CC haematopoietic disorders, inflammatory conditions (e.g. septic shock,
 CC sepsis, reperfusion injury, inflammatory bowel disease, Crohn's disease),
 CC respiratory disorders (e.g. asthma and allergy), gastrointestinal
 CC disorders, cancers (e.g. gastric, ovarian, lung, bladder, liver and
 CC breast), central nervous system (CNS) disorders (e.g. ischaemic brain
 CC injury and/or stroke, traumatic brain injury), neurodegenerative
 CC disorders (e.g. Parkinson's disease and Alzheimer's disease, AIDS-related
 CC dementia, and prion disease), cardiovascular disorders (e.g.
 CC atherosclerosis, myocarditis, cardiovascular disease, and cardiopulmonary
 CC bypass complications), inflammation (e.g. hepatitis, gout, trauma,
 CC pancreatitis, sarcoidosis, dermatitis, allogenic transplant rejection),
 CC blood-related disorders (thrombosis, arterial thrombosis),
 CC hyperproliferative disorders, renal disorders (e.g. acute
 CC glomerulonephritis), endocrine disorders (e.g. Addison's disease,
 CC hyperthyroidism, hypoparathyroidism), liver diseases and disorders,
 CC reproductive system disorders (e.g. endometriosis), infectious diseases,
 CC and pancreatic disorders. Many other diseases and disorders are listed in
 CC the specification. They also useful as a vaccine adjuvant. Further they
 CC are useful to enhance or inhibit complement mediated cell lysis, for
 CC stimulating wound and tissue repair, angiogenesis, and the repair of
 CC vascular or lymphatic diseases or disorders. They are also useful
 CC to prevent hair loss, to modulate mammalian characteristics such as body
 CC height, weight, hair colour, and to increase or decrease storage

CC capabilities, fat content, lipid, protein, carbohydrate, vitamins,
 CC minerals, cofactors or other nutritional components. The proteins are
 CC also useful for identifying binding partners. The present sequence
 CC represents a secreted protein of the invention.
 XX
 SQ Sequence 298 AA;
 Query Match 99.3%; Score 274; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 1.2e-260;
 Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 YHKAYGFSAPKDDQVTVAVYQAEILACKTPKTKVXSRLEWKLGSRVSFYVYQOTLQGD 60
 DB 23 YHKAYGFSAPKDDQVTVAVYQAEILACKTPKTKVXSRLEWKLGSRVSFYVYQOTLQGD 82
 QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTTLVLA VAPVPSCEVP 120
 DB 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSGQGNLEEDTTLVLA VAPVPSCEVP 142
 QY 121 SSALSGTVVRLRCODKEGNPAPEYTWFKDGRLLLENPRLGSSQSTNSSTYTNKTGTLOFN 180
 DB 143 SSALSGTVVRLRCODKEGNPAPEYTWFKDGRLLLENPRLGSSQSTNSSTYTNKTGTLOFN 202
 QY 181 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNISGIIAAVWVVALVISVCGLGVCYQAQ 240
 DB 203 TVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNISGIIAAVWVVALVISVCGLGVCYQAQ 262
 QY 241 RKGYSKETSFKQSNSSSKATTMTSENDFKHTKSPFI 276
 DB 263 RKGYSKETSFKQSNSSSKATTMTSENDFKHTKSPFI 298
 RESULT 6
 ABR00172
 ID ABR00172 standard; Protein; 298 AA.
 XX
 AC ABR00172;
 DT 03-APR-2003 (first entry)
 XX
 DE Human gene 162 encoded secreted protein HTEEB42, SEQ ID NO:461.
 XX
 KW Human; secreted protein; digestive disorder; gastrointestinal disorder;
 KW mouth; oesophagus; stomach; small intestine; large intestine; liver;
 KW biliary tract; pancreas; cancer; tumour; hyperproliferative disorder;
 KW immune disorder; inflammation; infection; wound healing; drug screening;
 KW chromosome identification; chromosome mapping; cytostatic; gene therapy;
 KW antiinflammatory; immunosuppressive; vulnerary; chromosome 21q21.2.
 OS Homo sapiens.
 XX
 PN WO200276488-A1.
 XX
 PD 03-OCT-2002.
 XX
 PF 19-MAR-2002; 2002WO-US08276.
 XX
 PR 21-MAR-2001; 2001US-277340P.
 PR 19-JUL-2001; 2001US-306171P.
 PR 13-NOV-2001; 2001US-331287P.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 XX
 PI Rosen CA, Ruben SM;
 XX
 DR WPI; 2003-029900/02.
 DR N-PSDB; AB271351.
 XX
 PT New human secreted proteins and nucleic acids, useful for detecting,
 PT preventing, diagnosing, prognosticating, treating and/or ameliorating
 PT e.g. gastrointestinal diseases and disorders, or cancers -
 XX
 PS Claim 13; Page 1046-1047; 1216pp; English.

XX ABZ71190-ABZ71478 represent cDNAs corresponding to 178 human secreted
CC protein genes, and ABP00011-ABP00299 represent the proteins they encode.
CC ABZ71479-ABZ71540 represent human secreted protein genomic fragments. The
CC invention also encompasses antibodies specific for the secreted proteins, the
CC the use of the secreted proteins in drug screening, and recombinant
CC vectors and host cells comprising a nucleic acid of the invention. The
CC secreted proteins, nucleic acids encoding them, antibodies or antibody
CC fragments specific for the secreted proteins, and modulators of protein
CC activity are useful for diagnosing, treating, ameliorating or preventing
CC digestive disorders. Such conditions include disorders of the mouth,
CC oesophagus, stomach, small intestine, large intestine, liver, biliary
CC tract and pancreas, and include cancers of these organs and tissues. The
CC secreted proteins and their nucleic acids may also be used in the
CC treatment of immune disorders, inflammation, infection,
CC hyperproliferative disorders, and to promote wound healing. Nucleic acids
CC of the invention may be used for chromosome identification, chromosome
CC mapping, in gene therapy, for identifying individuals from minute
CC biological samples, as hybridisation probes, and as molecular weight
CC markers. The present sequence represents a human secreted protein of the
CC invention.
XX SQ Sequence 298 AA;

Query Match 99.3%; Score 274; DB 24; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.2e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKVGFSAKQDVVAVKYQAILACKTPKTVXSRLEWKLGSRVSFVYQQTLOGD 60
DB 23 YHKVGFSAKQDVVAVKYQAILACKTPKTVXSRLEWKLGSRVSFVYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTTLVLVAVAPVSCVVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQONLEEDTTLVLVAVAPVSCVVP 142
QY 121 SSALSGTVVELRCQKGNPAPEYTWFKDGIILLENPRLGSGSTNSSTYMTNTKTGLQPN 180
DB 143 SSALSGTVVELRCQKGNPAPEYTWFKDGIILLENPRLGSGSTNSSTYMTNTKTGLQPN 202
QY 181 TVSKLDTGYSCEARNVSGYRRCPCGKRMQVDDNLISGIIAAVVALVTSVGLGVCAVQAQ 240
DB 203 TVSKLDTGYSCEARNVSGYRRCPCGKRMQVDDNLISGIIAAVVALVTSVGLGVCAVQAQ 262
QY 241 RKGYFSKTSFQKSNSSSKATMTSENDFKHTKSFII 276
DB 263 RKGYFSKTSFQKSNSSSKATMTSENDFKHTKSFII 298

RESULT 7
AAW85457
ID AAW85457 standard; Protein; 298 AA.
XX AC AAW85457;
XX DT 25-FEB-1999 (first entry)
XX DE Secreted protein encoded by clone ct864_4.
XX KW Secreted protein; nutritional activity; immune stimulating; vaccine;
XX KW suppressing activity; haematopoiesis regulating activity;
XX KW tissue growth activity; activin; inhibin activity; chemotaxis;
XX KW chemokine activity; haemostasis; thrombolytic activity; receptor;
XX KW ligand; anti-inflammatory; cadherin; tumour invasion suppressor;
XX KW tumour inhibition; gene therapy.
XX OS Homo sapiens.
XX KW WO9842739-A2.
XX PN 01-OCT-1998.
XX PD 20-MAR-1998; 98WO-US05653.
XX PF

XX 19-MAR-1998; 98US-0044466.
PR 21-MAR-1997; 97US-0822167.
XX PA (GEMY) GENETICS INST INC.
XX PI Agostino MJ, Jacobs K, Lavallie ER, McCoy JM, Merberg D;
PI Racie LA, Spaulding V, Treacy M;
XX WPI; 1998-609890/51.
DR N-PSDB; AAV82780.
XX New polynucleotides encoding secreted human proteins - derived from
PT human foetal brain, adult brain, foetal kidney, placenta or adult
PT pineal gland cDNA libraries.
XX PS Claim 17; Page 73-74; 113pp; English.
XX CC The present sequence represents a secreted protein. The polynucleotide
CC and secreted protein are predicted to have biological activities which
CC would make them suitable for treating, preventing or ameliorating medical
CC conditions in humans and animals, although no supporting data is given.
CC Suggested activities include nutritional activity, immune stimulating
CC (e.g. as vaccines) or suppressing activity, haematopoiesis regulating
CC activity, tissue growth activity, activin/inhibin activity,
CC chemotactic/chemokinetic activity, haemostatic and thrombolytic activity,
CC receptor/ligand activity, anti-inflammatory activity, cadherin/tumour
CC invasion suppressor activity, and tumour inhibition activity (no data is
CC given in the specification to support these activities). The
CC polynucleotide is also stated to be useful for gene therapy.
XX SQ Sequence 298 AA;

Query Match 87.0%; Score 240; DB 19; Length 298;
Best Local Similarity 100.0%; Pred. No. 3e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKLGSRVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTTLVLVAVAPVSCVPSALSGTVVELRCQKGNPAPEYTWFKDGIILLEN 156
DB 119 QNLEEDTTLVLVAVAPVSCVPSALSGTVVELRCQKGNPAPEYTWFKDGIILLEN 178
QY 157 PRLGSGSTNSSTYMTNTKTGLQFNVTGYSCEARNVSGYRRCPCGKRMQVDDNLIS 216
DB 179 PRLGSGSTNSSTYMTNTKTGLQFNVTGYSCEARNVSGYRRCPCGKRMQVDDNLIS 238
QY 217 GIIAAVVVALVISVGLGVCAVQKGYFSKTSFQKSNSSSKATMTSENDFKHTKSFII 276
DB 239 GIIAAVVVALVISVGLGVCAVQKGYFSKTSFQKSNSSSKATMTSENDFKHTKSFII 298

RESULT 8
AAU00512
ID AAU00512 standard; Protein; 298 AA.
XX AC AAU00512;
XX DT 09-MAY-2001 (first entry)
XX DE Human junctional adhesion protein (JAM2).
XX KW Junctional adhesion protein; JAM2; cellular localisation;
XX KW cellular expression; immunoprecipitation; stroke; phosphorylation;
XX KW glycosylation; paracellular migration; inflammatory disease;
XX KW arthritis; asthma; rheumatoid arthritis; inflammatory bowel disease;
XX KW Crohn's disease.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers

CC diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
 CC such as asthma or other respiratory problems. (II) is useful to express
 CC recombinant protein, as markers for tissues in which the corresponding
 CC protein is preferentially expressed and in gene therapy. The present
 CC sequence is that of a polypeptide of the invention.

XX Sequence 298 AA;
 SQ
 Query Match 87.0%; Score 240; DB 23; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLWKKLGRSVFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCVSPSQG 96
 DB 59 SRLWKKLGRSVFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCVSPSQG 118
 QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTWFKDGIRLLEN 156
 DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTWFKDGIRLLEN 178
 QY 157 PRLGSQSTNSSYTMNTKTGTGLQFNTVSKLDTGEYSCEARNVGYRRCCKRMQVDDLNIS 216
 DB 179 PRLGSQSTNSSYTMNTKTGTGLQFNTVSKLDTGEYSCEARNVGYRRCCKRMQVDDLNIS 238
 QY 217 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSPFI 276
 DB 239 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSPFI 298

RESULT 10
 AA016452
 ID AA016452 standard; protein; 298 AA.
 XX AC AA016452;
 XX DT 17-APR-2003 (first entry)
 XX DE Human junctional adhesion molecule 2 (huJAM2).
 XX KW Human; gene therapy; extracellular region; junctional adhesion molecules;
 KW huJAM; immune system disorder; immune deficiency; autoimmune disorder;
 KW inflammatory disorder; cancer; wound healing; cardiovascular disease;
 KW full-length membrane-bound huJAM protein.
 XX OS Homo sapiens.

XX Key Location/Qualifiers
 FH Peptide 1..28
 FT /label= Signal_peptide
 FT Domain 29..236
 FT /note= "Extracellular domain; Specifically claimed
 FT region"
 FT Protein 29..298
 FT /note= "Mature huJAM2"

XX WO2003008541-A2.
 XX 30-JAN-2003.
 XX 05-JUL-2002; 2002WO-US19800.
 XX 16-JUL-2001; 2001US-305752P.
 PR 05-FEB-2002; 2002US-354345P.
 XX (BLIL) LILLY & CO ELI.
 XX Heuer JG, Smith RC, Su EW;
 XX WPI: 2003-221848/21.
 DR N-PSDB; AAL51599.
 XX New extracellular human junctional adhesion molecule (huJAM)

PT polypeptide, useful for treating an immune system disorder such as an

PT immune deficiency or an inflammatory disorder, cancer, wound healing,
 PT or a cardiovascular disease -
 XX Disclosure; Fig 1; 131pp; English.
 CC The invention comprises the DNA and protein sequences of the
 CC extracellular region of human junctional adhesion molecules (huJAM). The
 CC extracellular huJAM DNA and protein sequences are useful in the treatment
 CC of: immune system disorders (e.g. immune deficiency); autoimmune
 CC disorders; inflammatory disorders; cancer; wound healing; or a
 CC cardiovascular disease. The present amino acid sequence represents the
 CC full-length membrane-bound huJAM2 protein.

XX Sequence 298 AA;
 SQ
 Query Match 87.0%; Score 240; DB 24; Length 298;
 Best Local Similarity 100.0%; Pred. No. 3e-227;
 Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 37 SRLWKKLGRSVFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCVSPSQG 96
 DB 59 SRLWKKLGRSVFVYQQTLOGDFKRAEMIDFNIRIKNVTSDAGKYRCVSPSQG 118
 QY 97 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTWFKDGIRLLEN 156
 DB 119 QNLEEDTTLVLVAPVPSCEVPSSALSGTVVELRCQKGNPAPEYTWFKDGIRLLEN 178
 QY 157 PRLGSQSTNSSYTMNTKTGTGLQFNTVSKLDTGEYSCEARNVGYRRCCKRMQVDDLNIS 216
 DB 179 PRLGSQSTNSSYTMNTKTGTGLQFNTVSKLDTGEYSCEARNVGYRRCCKRMQVDDLNIS 238
 QY 217 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSPFI 276
 DB 239 GIIAAVVVVALVISVCGLVGYAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSPFI 298

RESULT 11
 AA08060
 ID AA08060 standard; Protein; 312 AA.
 XX AC AA08060;
 XX DT 11-SEP-2000 (first entry)
 XX DE Human PRO245 protein.
 XX KW Inflammatory cell infiltration; immune response; T cell proliferation;
 KW anti-inflammatory; anti-autoimmune; anti-diabetic; spondyloarthropathy;
 KW T cell-mediated disease; spondyloarthropathy; sclerosis; renal disease;
 KW inflammatory myopathy; hemolytic anemia; thrombocytopenia; thyroiditis;
 KW diabetes mellitus; demyelinating polyneuropathy; Guillain-Barre syndrome;
 KW multiple sclerosis; polyneuropathy; hepatitis; cirrhosis; enteropathy;
 KW sclerosing cholangitis; inflammatory bowel disease; Whipple's disease;
 KW skin disease; dermatitis; psoriasis; asthma; allergic rhinitis; tumor;
 KW food hypersensitivity; urticaria; eosinophilic pneumonia; transplant;
 KW idiopathic pulmonary fibrosis; graft rejection; PRO245; human.

XX OS Homo sapiens.
 XX PN WO9914241-A2.
 XX 25-MAR-1999.
 XX 17-SEP-1998; 98WO-US19437.
 XX 17-SEP-1997; 97US-0059119.
 PR 18-SEP-1997; 97US-0059263.
 PR 28-OCT-1997; 97US-0063550.
 PR 12-NOV-1997; 97US-0065186.
 PR 21-NOV-1997; 97US-0066364.
 PR 24-NOV-1997; 97US-0066770.
 PR 04-JUN-1998; 98US-0088026.

QY 157 PRLGSSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNIS 216
|||||
Db 179 PRLGSSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNIS 238
|||||
QY 217 GIIAAVVVVVALVISVGLGVCVCAQRKGYPFSKETSFOKSNSSSKATTMSEN 266
|||||
Db 239 GIIAAVVVVVALVISVGLGVCVCAQRKGYPFSKETSFOKSNSSSKATTMSEN 288
|||||
RESULT 13
AAV13354
ID AAV13354 standard; Protein; 312 AA.
XX
AC AAV13354;
XX
XX 25-JUN-1999 (first entry)
XX
DE Amino acid sequence of protein PRO245.
XX
KW Secreted protein; transmembrane protein; human; enterocolitis;
KW Zollinger-Ellison syndrome; Gastrointestinal ulceration;
KW congenital microvillus atrophy; skin disease; cell growth;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy;
KW fibromodulin; dermal scarring; Usher Syndrome; Atrophia areata;
KW anti-thrombotic; wound healing; tissue repair.
XX
OS Homo sapiens.
XX
XX WO9914328-A2.
XX
XX 25-MAR-1999.
XX
XX 16-SEP-1998; 98WO-US19330.
XX
XX 25-NOV-1997; 97US-006840.
PR 17-SEP-1997; 97US-0059113.
PR 17-SEP-1997; 97US-0059115.
PR 17-SEP-1997; 97US-0059117.
PR 17-SEP-1997; 97US-0059119.
PR 17-SEP-1997; 97US-0059121.
PR 17-SEP-1997; 97US-0059122.
PR 17-SEP-1997; 97US-0059184.
PR 18-SEP-1997; 97US-0059263.
PR 18-SEP-1997; 97US-0059266.
PR 15-OCT-1997; 97US-0062125.
PR 15-OCT-1997; 97US-0062125.
PR 17-OCT-1997; 97US-0062285.
PR 17-OCT-1997; 97US-0062287.
PR 21-OCT-1997; 97US-0063486.
PR 24-OCT-1997; 97US-0062814.
PR 24-OCT-1997; 97US-0062816.
PR 24-OCT-1997; 97US-0063045.
PR 24-OCT-1997; 97US-0063120.
PR 24-OCT-1997; 97US-0063121.
PR 24-OCT-1997; 97US-0063127.
PR 24-OCT-1997; 97US-0063128.
PR 27-OCT-1997; 97US-0063329.
PR 27-OCT-1997; 97US-0063327.
PR 28-OCT-1997; 97US-0063541.
PR 28-OCT-1997; 97US-0063542.
PR 28-OCT-1997; 97US-0063544.
PR 28-OCT-1997; 97US-0063544.
PR 28-OCT-1997; 97US-0063549.
PR 28-OCT-1997; 97US-0063550.
PR 28-OCT-1997; 97US-0063564.
PR 29-OCT-1997; 97US-0063435.
PR 29-OCT-1997; 97US-0063704.
PR 29-OCT-1997; 97US-0063732.
PR 29-OCT-1997; 97US-0063738.
PR 29-OCT-1997; 97US-0063734.
PR 29-OCT-1997; 97US-0064215.
PR 29-OCT-1997; 97US-0063735.
PR 31-OCT-1997; 97US-0063870.

PR 31-OCT-1997; 97US-0064103.
PR 03-NOV-1997; 97US-0064248.
PR 07-NOV-1997; 97US-0064809.
PR 12-NOV-1997; 97US-0065186.
PR 17-NOV-1997; 97US-0065846.
PR 18-NOV-1997; 97US-0065693.
PR 21-NOV-1997; 97US-0066120.
PR 21-NOV-1997; 97US-0066364.
PR 24-NOV-1997; 97US-0066772.
PR 24-NOV-1997; 97US-0066466.
PR 24-NOV-1997; 97US-0066770.
PR 24-NOV-1997; 97US-0066511.
PR 24-NOV-1997; 97US-0066453.
XX
XX (GETH) GENENTECH INC.
XX
PI Chen J, Goddard A, Gurney AL, Pennica D, Wood WI, Yuan J;
XX
XX WPI; 1999-229533/19.
XX N-PSDB; AAX52225.
XX
XX New isolated human genes and polypeptides used in, e.g. treatment of
PT gastrointestinal ulceration
XX
XX Claim 12; Fig 24; 320pp; English.
XX
XX AAV13344-403 represent secreted and transmembrane human proteins.
CC The cDNA sequences are obtained from cDNA libraries, prepared from
CC fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina.
CC The encoded polypeptides have specific uses based on their homology to
CC known polypeptides, e.g. PRO211 and PRO217 can be used for disorders
CC associated with the preservation and maintenance of gastrointestinal
CC mucosa and the repair of acute and chronic mucosal lesions
CC (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal
CC ulceration and congenital microvillus atrophy), skin diseases associated
CC with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial
CC cancers such as lung squamous cell carcinoma of the vulva and gliomas),
CC potent effects on cell growth and development, diseases related to
CC growth or survival of nerve cells including Parkinson's disease,
CC Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as
CC for fibromodulin, e.g. for reducing dermal scarring. PRO264 can be used
CC as a target for anti-tumor drugs. PRO533 may be used in the treatment
CC of Usher Syndrome or Atrophia areata; PRO269 can be used as an
CC anti-thrombotic agent; PRO287 polypeptides and portions may have
CC therapeutic applications in wound healing and tissue repair; PRO317 can
CC be used for treating problems of the kidney, uterus, endometrium, blood
CC vessels, or related tissue, e.g. in the heart of genital tract.
XX
XX SQ Sequence 312 AA;
Query Match 83.3%; Score 230; DB 20; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 179 PRLGSSQSTNSSYTMNTKTGTLQFNTVSKLDTGEYSCAARNVGYRRCPCGRKMQVDDLNIS 238
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QY 217 GIIAAVVVVVALVISVGLGVCVCAQRKGYPFSKETSFOKSNSSSKATTMSEN 266
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Db 239 GIIAAVVVVVALVISVGLGVCVCAQRKGYPFSKETSFOKSNSSSKATTMSEN 288
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AAB33421

ID AAB33421 standard; Protein; 312 AA.
 AC AAB33421;
 XX
 DT 29-JAN-2001 (first entry)
 XX
 DE Human PRO245 protein UNQ219 SEQ ID NO:36.
 DE
 XX Human; immune related disease; diagnosis; antinflammatory; cardiant;
 KW dermatological; antiarthritic; antirheumatic; immunosuppressive;
 KW haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
 KW antianemic; hepatotropic; virucide; antiporiatic; antiallergic;
 KW antiaethmatic; systemic lupus erythematosus; rheumatoid arthritis;
 KW osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
 KW idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
 KW systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
 KW autoimmune thrombocytopaenia; immune-mediated renal disease;
 KW demyelinating disease; hepatobiliary disease; Whipple's disease;
 KW inflammatory bowel disease; gluten-sensitive enteropathy;
 KW autoimmune disease; immune-mediated skin disease; allergic disease;
 KW immunological disease; transplantation associated disease;
 KW graft rejection; graft-versus-host-disease.
 XX
 OS Homo sapiens.
 XX
 PN WQ200053758-A2.
 XX
 PD 14-SEP-2000.
 XX
 PF 02-MAR-2000; 2000WO-US05841.
 XX
 PR 08-MAR-1999; 99WO-US05028.
 PR 10-MAR-1999; 99US-0123618.
 PR 12-MAR-1999; 99US-0123957.
 PR 21-MAR-1999; 99US-0125775.
 PR 12-APR-1999; 99US-0128849.
 PR 20-APR-1999; 99WO-US08615.
 PR 28-APR-1999; 99US-0131445.
 PR 04-MAY-1999; 99US-0132371.
 PR 14-MAY-1999; 99US-0134287.
 PR 02-JUN-1999; 99WO-US12252.
 PR 23-JUN-1999; 99US-0141037.
 PR 20-JUL-1999; 99US-0144758.
 PR 26-JUL-1999; 99US-0145698.
 PR 28-JUL-1999; 99US-0146222.
 PR 01-SEP-1999; 99WO-US20111.
 PR 08-SEP-1999; 99WO-US20594.
 PR 13-SEP-1999; 99WO-US20944.
 PR 15-SEP-1999; 99WO-US21090.
 PR 15-SEP-1999; 99WO-US21547.
 PR 05-OCT-1999; 99WO-US23089.
 PR 29-OCT-1999; 99US-0162506.
 PR 30-NOV-1999; 99WO-US28214.
 PR 30-NOV-1999; 99WO-US28313.
 PR 30-NOV-1999; 99WO-US28409.
 PR 01-DEC-1999; 99WO-US28301.
 PR 01-DEC-1999; 99WO-US28634.
 PR 02-DEC-1999; 99WO-US28551.
 PR 02-DEC-1999; 99WO-US28564.
 PR 02-DEC-1999; 99WO-US28565.
 PR 16-DEC-1999; 99WO-US30095.
 PR 20-DEC-1999; 99WO-US30999.
 PR 30-DEC-1999; 99WO-US31274.
 PR 05-JAN-2000; 2000WO-US00219.
 PR 06-JAN-2000; 2000WO-US00277.
 PR 11-FEB-2000; 2000WO-US03565.
 PR 18-FEB-2000; 2000WO-US04341.
 PR 18-FEB-2000; 2000WO-US04342.
 PR 22-FEB-2000; 2000WO-US04414.
 XX
 PA (GETH) GENENTECH INC.
 XX

PI Ashkenazi AJ, Baker KP, Goddard A, Gurney AL, Hebert C, Henzel W;
 PI Kabakoff RC, Lu Y, Pan J, Pennica D, Shelton DL, Smith V;
 PI Stewart TA, Tumas D, Watanabe CK, Wood WI, Yan M;
 XX
 DR WPI; 2000-572271/53.
 DR N-PSDB; AAC58586.
 XX
 PT Sixty four PRO polypeptides, useful in the diagnosis and treatment of
 PT immune related disorders, e.g. systemic lupus erythematosus, rheumatoid
 PT arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
 PS Claim 33; Fig 16; 309pp; English.
 XX
 CC The present invention describes sixty four human PRO proteins which can
 CC be used in the treatment of immune related diseases. The human PRO
 CC proteins, anti-PRO antibodies, agonists and antagonists are useful for
 CC treating and diagnosing immune related disorders. The disorders are
 CC selected from systemic lupus erythematosus, rheumatoid arthritis,
 CC osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
 CC systemic sclerosis, idiopathic chronic arthritis, myopathies, Sjogren's
 CC syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
 CC anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,
 CC immune-mediated renal disease, demyelinating diseases of the central
 CC and peripheral nervous systems, hepatobiliary diseases, inflammatory
 CC bowel disease, gluten-sensitive enteropathy and Whipple's disease,
 CC autoimmune or immune-mediated skin diseases, allergic diseases,
 CC immunological diseases of the lung, and transplantation associated
 CC diseases including graft rejection and graft-versus-host-disease.
 CC AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
 CC in the isolation of human PRO sequences. AAC58579 to AAC58642 and
 CC AAB33414 to AAB33477 represent human PRO polynucleotide and protein
 CC sequences given in the exemplification of the present invention.
 XX
 SQ Sequence 312 AA;
 Query Match 83.3%; Score 230; DB 21; Length 312;
 Best Local Similarity 100.0%; Pred. No. 2.1e-217;
 Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 DB 59 SRLEWKKLGRSVSFVYVYQQTLOGDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
 QY 97 QNLEEDTVTLVLVAVAPVPSCEVPSSALSGTVVELRCQDKGNPAPETWFKDGIRLLEN 156
 DB 119 QNLEEDTVTLVLVAVAPVPSCEVPSSALSGTVVELRCQDKGNPAPETWFKDGIRLLEN 178
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 DB 179 PRLGQSTNSSSYTMTNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCFGKRMQVDDLNIS 238
 QY 217 GIITAAVVVALVLSVCGLVGYVYQYRKGYSKETSFOKSNSSSKATTMSEN 266
 DB 239 GIITAAVVVALVLSVCGLVGYVYQYRKGYSKETSFOKSNSSSKATTMSEN 288
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 ID AAB24401 standard; Protein; 312 AA.
 AC AAB24401;
 XX
 DT 07-NOV-2000 (first entry)
 XX
 DE Human PRO245 protein sequence SEQ ID NO:67.
 KW Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
 KW diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
 KW angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
 KW cytostatic; gene therapy; vaccine.
 XX
 OS Homo sapiens.
 XX

PN WO200032221-A2.
XX PD 08-JUN-2000.
XX PF 30-NOV-1999; 99WO-US28313.
XX PR 01-DEC-1998; 98WO-US25108.
PR 16-DEC-1998; 98US-0112850.
PR 12-JAN-1999; 99US-0115554.
PR 08-MAR-1999; 99WO-US05028.
PR 12-MAR-1999; 99US-0123957.
PR 28-APR-1999; 99US-0131445.
PR 14-MAY-1999; 99US-0134287.
PR 02-JUN-1999; 99WO-US12252.
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99WO-US20111.
PR 08-SEP-1999; 99WO-US20594.
PR 13-SEP-1999; 99WO-US20944.
PR 15-SEP-1999; 99WO-US21090.
PR 15-SEP-1999; 99WO-US21547.
PR 05-OCT-1999; 99WO-US23089.
PR 29-OCT-1999; 99US-0162506.
XX (GETH) GENENTECH INC.
XX PA Ashkenazi AJ, Baker KP, Ferrara N, Gerber H, Hillan KJ, Goddard A;
PI Godowski PJ, Gurney AL, Klein RD, Kuo SS, Paoni NF, Smith V;
PI Watanabe CK, Williams PM, Wood WI;
XX DR WPI; 2000-412154/35.
DR N-PSDB; AAA77562.
XX PT Nucleic acids encoding PRO polypeptides useful for preventing
PT diagnosing and treating diagnosing a cardiovascular, endothelial or
PT angiogenic disorders in mammals -
XX PS Claim 72; Fig 28; 315pp; English.
XX CC The present invention describes nucleic acids encoding PRO polypeptides
CC useful for preventing, diagnosing and treating diagnosing a
CC cardiovascular, endothelial or angiogenic disorder in mammals by
CC modulating cell proliferation, angiogenesis and cardiovascularisation,
CC and for identifying agonists and antagonists of these processes. The
CC nucleic acids and the proteins they encode may be used in the
CC prevention, treatment and diagnosis of diseases associated with
CC inappropriate PRO expression such as cardiovascular, endothelial or
CC angiogenic disorders in mammals (e.g. atherosclerosis, cancers and
CC cardiac hypertrophy). For example, the nucleic acids (NCs) and vectors
CC containing them and the PRO polypeptide may be used to treat disorders
CC associated with decreased PRO expression. AAA77510 to AAA77721 and
CC AAB24388 to AAB24435 represent nucleotide and protein sequences used in
CC the exemplification of the present invention.
XX SQ Sequence 312 AA;
Query Match 83.3%; Score 230; DB 21; Length 312;
Best Local Similarity 100.0%; Pred. No. 2.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSVVYQOTLQGFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSVVYQOTLQGFKNRAEMIDFNIRIKNVTNRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLEVLVAPVPCEVPSSALSGTWVELRCQDEGNPAPEYTFKDGIRLLEN 156
Db 119 QNLEEDTVTLEVLVAPVPCEVPSSALSGTWVELRCQDEGNPAPEYTFKDGIRLLEN 178
QY 157 PRLGQSTNSYTNNTKGTGLQFNTVSKLDTGEYSCEARNVGYRRCGKRMQVDDLNIS 216
Db 179 PRLGQSTNSYTNNTKGTGLQFNTVSKLDTGEYSCEARNVGYRRCGKRMQVDDLNIS 238

QY 217 GIIAAVVVVALVISVCGLGVCYAQRKGYSFKTSFQKSNSSSKATTMTSEN 266
Db 239 GIIAAVVVVALVISVCGLGVCYAQRKGYSFKTSFQKSNSSSKATTMTSEN 288

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Job time : 36.5436 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:22:07 ; Search time 13.9443 Seconds
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Title: US-09-852-797-76_COPY_23_298
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Gapop 60.0 , Gapext 60.0

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Word size: 50
Total number of hits satisfying chosen parameters: 2

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Post-processing: Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	230	83.3	312	4	US-09-254-465A-9

ALIGNMENTS

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; Sequence 76, Application US/09152060
; Patent No. 6448230
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P1.05
; CURRENT APPLICATION NUMBER: US/09/152,060
; EARLIER FILING DATE: 1998-09-11
; EARLIER APPLICATION NUMBER: PCT/US98/04858
; EARLIER FILING DATE: 1998-03-12
; EARLIER APPLICATION NUMBER: 60/040,762
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/040,710
; EARLIER FILING DATE: 1997-03-14
; EARLIER APPLICATION NUMBER: 60/050,934
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,100
; EARLIER FILING DATE: 1997-05-30

; EARLIER APPLICATION NUMBER: 60/048,357
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/048,189
; EARLIER FILING DATE: 1997-05-30
; EARLIER APPLICATION NUMBER: 60/057,765
; EARLIER FILING DATE: 1997-09-05
; EARLIER APPLICATION NUMBER: 60/048,970
; EARLIER FILING DATE: 1997-06-06
; EARLIER APPLICATION NUMBER: 60/068,368
; EARLIER FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-152-060-76

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QY 61 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEGGQNLDEEDTTLVLEVPAPVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEGGQNLDEEDTTLVLEVPAPVPSCEVP 142
QY 121 SSALSGTVBELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTMTKGTLOFN 180
DB 143 SSALSGTVBELRCQDKEGNPAPEYTWFKDGIIRLLENPRLGQSQTNSSTMTKGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGYRRCPGKEMQVDDLNISGIIAAVVVVVALVISVCGLGVCYAO 240
DB 203 TVSKLDTGEYSCEARNVGYRRCPGKEMQVDDLNISGIIAAVVVVVALVISVCGLGVCYAO 262
QY 241 RKGYSKTSFQKSNSSSKATTMSDFKHTKSFII 276
DB 263 RKGYSKTSFQKSNSSSKATTMSDFKHTKSFII 298

RESULT 2
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; Sequence 9, Application US/09254465A
; Patent No. 6410708
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/254,465A
; CURRENT FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21

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; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-254-465A-9

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Qy     217 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKSNSSSKATTWSEN 266
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GenCore version 5.1.6
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Title: US-09-852-797-76_COPY_23_298

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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2	274	99.3	298	9	US-09-852-659A-76
3	274	99.3	298	10	US-09-852-797-76
4	240	87.0	298	9	US-09-745-763-38
5	240	87.0	298	9	US-09-799-777-30
6	240	87.0	298	15	US-10-139-849-2
7	240	87.0	298	16	US-10-192-791-2
8	230	83.3	312	10	US-09-909-320-64
9	230	83.3	312	10	US-09-909-088B-64
10	230	83.3	312	10	US-09-905-291A-64
11	230	83.3	312	10	US-09-953-499-9
12	230	83.3	312	10	US-09-902-853-64
13	230	83.3	312	10	US-09-907-824-64
14	230	83.3	312	10	US-09-907-841-64
15	230	83.3	312	11	US-09-904-011-64

16	230	83.3	312	11	US-09-906-742-64
17	230	83.3	312	11	US-09-906-838-64
18	230	83.3	312	11	US-09-907-613-64
19	230	83.3	312	11	US-09-907-942-64
20	230	83.3	312	11	US-09-904-859-64
21	230	83.3	312	11	US-09-909-204-64
22	230	83.3	312	11	US-09-904-820-64
23	230	83.3	312	11	US-09-904-786-64
24	230	83.3	312	11	US-09-906-646-64
25	230	83.3	312	11	US-09-906-700-64
26	230	83.3	312	11	US-09-903-786-64
27	230	83.3	312	11	US-09-902-903-64
28	230	83.3	312	11	US-09-903-749A-64
29	230	83.3	312	11	US-09-904-119-64
30	230	83.3	312	11	US-09-904-956-64
31	230	83.3	312	11	US-09-902-736-64
32	230	83.3	312	11	US-09-907-794-64
33	230	83.3	312	11	US-09-903-943-64
34	230	83.3	312	11	US-09-904-462-64
35	230	83.3	312	11	US-09-907-925-64
36	230	83.3	312	11	US-09-902-692-64
37	230	83.3	312	11	US-09-903-520-64
38	230	83.3	312	11	US-09-905-056-64
39	230	83.3	312	11	US-09-909-064-64
40	230	83.3	312	11	US-09-904-553-64
41	230	83.3	312	11	US-09-905-381-64
42	230	83.3	312	11	US-09-905-088-64
43	230	83.3	312	11	US-09-907-575-64
44	230	83.3	312	11	US-09-905-075-64
45	230	83.3	312	11	US-09-902-759-64

ALIGNMENTS

RESULT 1
US-09-853-161-76
; Sequence 76, Application US/09853161
; Patent No. US20020076756A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P3
; CURRENT APPLICATION NUMBER: US/09/853,161
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76
; LENGTH: 298

;
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-853-161-76

Query Match 99.3%; Score 274; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKQOVVTVAVXQEAAILACKTPKKTVXSRLEWKKLGRSVSFVYYQQTLOGD 60
Db 23 YHKAYGFSAPKQOVVTVAVXQEAAILACKTPKKTVXSRLEWKKLGRSVSFVYYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLENPRLGSSQSTNSSTYTMNTKTGTLOFN 180
Db 143 SSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLENPRLGSSQSTNSSTYTMNTKTGTLOFN 202
QY 181 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDNLNIGIITAAVVALVSVCGLGVCYQAQ 240
Db 203 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDNLNIGIITAAVVALVSVCGLGVCYQAQ 262
QY 241 RKGYSKETSFOKSNSSSKATMTSENDFKHTKSFII 276
Db 263 RKGYSKETSFOKSNSSSKATMTSENDFKHTKSFII 298

RESULT 2

US-09-852-659A-76
; Sequence 76, Application US/09852659A
; Patent No. US20020077287A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P4
; CURRENT APPLICATION NUMBER: US/09/852,659A
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 121
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 76

;
; LENGTH: 298
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SITE
; LOCATION: (42)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
; NAME/KEY: SITE
; LOCATION: (58)
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-659A-76
Query Match 99.3%; Score 274; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKAYGFSAPKQOVVTVAVXQEAAILACKTPKKTVXSRLEWKKLGRSVSFVYYQQTLOGD 60
Db 23 YHKAYGFSAPKQOVVTVAVXQEAAILACKTPKKTVXSRLEWKKLGRSVSFVYYQQTLOGD 82
QY 61 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 120
Db 83 FKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQGNLEEDVTTLVLVAPVPSCEVP 142
QY 121 SSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLENPRLGSSQSTNSSTYTMNTKTGTLOFN 180
Db 143 SSALSGTVVELRCQDKEGNPAPEYTFWKDGIRLLENPRLGSSQSTNSSTYTMNTKTGTLOFN 202
QY 181 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDNLNIGIITAAVVALVSVCGLGVCYQAQ 240
Db 203 TVSKLDTGYSCEARNVGYRRCPGKRMQVDDNLNIGIITAAVVALVSVCGLGVCYQAQ 262
QY 241 RKGYSKETSFOKSNSSSKATMTSENDFKHTKSFII 276
Db 263 RKGYSKETSFOKSNSSSKATMTSENDFKHTKSFII 298

RESULT 3

US-09-852-797-76
; Sequence 76, Application US/09852797
; Patent No. US20020172994A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: 28 Human Secreted Proteins
; FILE REFERENCE: P2003P2
; CURRENT APPLICATION NUMBER: US/09/852,797
; CURRENT FILING DATE: 2001-05-11
; PRIOR APPLICATION NUMBER: 60/265,583
; PRIOR FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: 09/152,060
; PRIOR FILING DATE: 1998-09-11
; PRIOR APPLICATION NUMBER: PCT/US98/04858
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/040,762
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/040,710
; PRIOR FILING DATE: 1997-03-14
; PRIOR APPLICATION NUMBER: 60/050,934
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,100
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,357
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/048,189
; PRIOR FILING DATE: 1997-05-30
; PRIOR APPLICATION NUMBER: 60/057,765
; PRIOR FILING DATE: 1997-09-05
; PRIOR APPLICATION NUMBER: 60/048,970
; PRIOR FILING DATE: 1997-06-06
; PRIOR APPLICATION NUMBER: 60/068,368
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 118

SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 76
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (42)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
LOCATION: (58)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-852-797-76

Query Match 99.3%; Score 274; DB 10; Length 298;
Best Local Similarity 100.0%; Pred. No. 4.5e-260; Mismatches 0; Indels 0; Gaps 0;
Matches 276; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 YHKYGFSAKDDQVVAVXVQEAIALACKTPKTKVXSRLEWKKLGRSVSFVYYQTLQGD 60
DB 23 YHKYGFSAKDDQVVAVXVQEAIALACKTPKTKVXSRLEWKKLGRSVSFVYYQTLQGD 82
QY 61 FKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPAVPSCEVP 120
DB 83 FKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQONLEEDTVTLVLVAPAVPSCEVP 142
QY 121 SSALSGTVVLELRCQEGNPAPEYTFWFKDGIKLLNPRLGSTNSSYTMNTKTGTLOFN 180
DB 143 SSALSGTVVLELRCQEGNPAPEYTFWFKDGIKLLNPRLGSTNSSYTMNTKTGTLOFN 202
QY 181 TVSKLDTGEYSCEARNVGVYRCRCQKRMQVDDNLISGIIAAVVVVALVISVCGLGVCYQAQ 240
DB 203 TVSKLDTGEYSCEARNVGVYRCRCQKRMQVDDNLISGIIAAVVVVALVISVCGLGVCYQAQ 262
QY 241 RKGYFSKTSFKNSSSSKATMTSENDFKHTKSFII 276
DB 263 RKGYFSKTSFKNSSSSKATMTSENDFKHTKSFII 298

RESULT 4
US-09-745-763-38
Sequence 38, Application US/09745763
Patent No. US20020065394A1
GENERAL INFORMATION:
APPLICANT: Jacobs, Kenneth
McCoy, John M.
Lavallie, Edward R.
Collins-Racie, Lisa A.
Evans, Cheryl
Merberg, David
Treacy, Maurice
Spaulding, Vikki
TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES
NUMBER OF SEQUENCES: 219
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genetics Institute, Inc.
STREET: 87 Cambridgepark Drive
CITY: Cambridge
STATE: MA
COUNTRY: U.S.A.
ZIP: 02140
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/745,763
FILING DATE: 18-Jun-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Sprunger, Suzanne A.

REGISTRATION NUMBER: 41,323
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 498-8284
TELEFAX: (617) 876-5851
INFORMATION FOR SEQ ID NO: 38:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
STRANDEDNESS: <Unknown>
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 38:
US-09-745-763-38

Query Match 87.0%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227; Mismatches 0; Indels 0; Gaps 0;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFVYYQTLQGD FKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKKLGRSVSFVYYQTLQGD FKNRAEMIDFNIRIKNVRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPAVPSCEVSFSSALSGTVVLELRCQEGNPAPEYTFWFKDGIKLLN 156
DB 119 QNLEEDTVTLVLVAPAVPSCEVSFSSALSGTVVLELRCQEGNPAPEYTFWFKDGIKLLN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLOFN TVSKLDTGEYSCEARNVGVYRCRCQKRMQVDDNLIS 216
DB 179 PRLGSQSTNSSYTMNTKTGTLOFN TVSKLDTGEYSCEARNVGVYRCRCQKRMQVDDNLIS 238
QY 217 GIIAAVVVVALVISVCGLGVCYQAORKGYSFKTSFKNSSSSKATMTSENDFKHTKSFII 276
DB 239 GIIAAVVVVALVISVCGLGVCYQAORKGYSFKTSFKNSSSSKATMTSENDFKHTKSFII 298

RESULT 5
US-09-799-777-30
Sequence 30, Application US/09799777
Patent No. US20020091244A1
GENERAL INFORMATION:
APPLICANT: Lal, Preeti
Hillman, Jennifer L.
Corley, Neil C.
Guegler, Karl J.
Baugh, Mariah
Sather, Susan
Shah, Purvi
TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS
NUMBER OF SEQUENCES: 154
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/799,777
FILING DATE: 06-Mar-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/002,485
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: BILLINGS, LUCY J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0459 US
TELECOMMUNICATION INFORMATION:

TELEPHONE: (650) 855-0555
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 298 amino acids
TYPE: amino acid
STRANDEDNESS: single
IMMEDIATE SOURCE:
TOPOLOGY: linear
LIBRARY: DUODNOT02
CLONE: 1704050
SEQUENCE DESCRIPTION: SEQ ID NO: 30 :
US-09-799-777-30

Query Match 87.0%; Score 240; DB 9; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFVYYQOTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKKLGRSVSFVYYQOTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
DB 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAENSVGVRRCGKRMQVDDLNIS 216
DB 179 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAENSVGVRRCGKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLGVCYVQAKRGYFSKETSFKNSNSSKATTTMSNDFKHTKSFII 276
DB 239 GIIAAVVVVALVISVCGLGVCYVQAKRGYFSKETSFKNSNSSKATTTMSNDFKHTKSFII 298

RESULT 6
US-10-139-849-2
Sequence 2, Application US/10139849
Publication No. US20030079238A1
GENERAL INFORMATION:
APPLICANT: Cunningham, Sonia
TITLE OF INVENTION: A POLYNUCLEOTIDE ENCODING A HUMAN JUNCTIONAL ADHESION PROTEIN (JAM 2)
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rockett, Milmanow & Katz, Ltd.
STREET: 180 N. Stetson Avenue, 2 Prudential Plaza,
Suite 4700
CITY: Chicago
STATE: IL
COUNTRY: U.S.A.
ZIP: 60601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/139,849
FILING DATE: 07-May-2002
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/09/643,929
FILING DATE: 23-Aug-2000
ATTORNEY/AGENT INFORMATION:
NAME: Katz, Martin L.
REGISTRATION NUMBER: 25,011
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-616-5400
TELEFAX: 312-616-5460
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:

LENGTH: 298 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein.
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-10-139-849-2
Query Match 87.0%; Score 240; DB 15; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFVYYQOTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKKLGRSVSFVYYQOTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
DB 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAENSVGVRRCGKRMQVDDLNIS 216
DB 179 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAENSVGVRRCGKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLGVCYVQAKRGYFSKETSFKNSNSSKATTTMSNDFKHTKSFII 276
DB 239 GIIAAVVVVALVISVCGLGVCYVQAKRGYFSKETSFKNSNSSKATTTMSNDFKHTKSFII 298

RESULT 7
US-10-192-791-2
Sequence 2, Application US/10192791
Publication No. US20030130166A1
GENERAL INFORMATION:
APPLICANT: Texas Biotechnology Corporation
TITLE OF INVENTION: A Polynucleotide Encoding a Human Junctional Adhesion Protein (J
FILE REFERENCE: TEX4542P0430
CURRENT APPLICATION NUMBER: US/10/192,791
CURRENT FILING DATE: 2003-12-10
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn version 3.1
SEQ ID NO 2
LENGTH: 298
TYPE: PRT
ORGANISM: Homo sapiens
US-10-192-791-2

Query Match 87.0%; Score 240; DB 16; Length 298;
Best Local Similarity 100.0%; Pred. No. 9.2e-227;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFVYYQOTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKKLGRSVSFVYYQOTLQGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
DB 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 157 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAENSVGVRRCGKRMQVDDLNIS 216
DB 179 PRLGSQSTNSSYTMNTKTGTLQFNVTGKLTGEYSCAENSVGVRRCGKRMQVDDLNIS 238
QY 217 GIIAAVVVVALVISVCGLGVCYVQAKRGYFSKETSFKNSNSSKATTTMSNDFKHTKSFII 276
DB 239 GIIAAVVVVALVISVCGLGVCYVQAKRGYFSKETSFKNSNSSKATTTMSNDFKHTKSFII 298

RESULT 8
US-09-909-320-64
Sequence 64, Application US/09909320
Patent No. US20020132240A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.

APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnovers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kijavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,320
PRIOR FILING DATE: 2002-01-04
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 64
LENGTH: 312
TYPE: PRT
ORGANISM: Homo sapiens
US-09-909-320-64
Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKIGRSYFVYVYQOTLQDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 96
DB 59 SRLEWKIGRSYFVYVYQOTLQDFKNRAEMIDFNIRIKNVTSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
DB 119 QNLEEDTVTLVLVAPVPSCEVPSSALSGTVVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178
QY 157 PRIGSQSTNSSYTMTKTGTLPNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNIS 216
DB 179 PRIGSQSTNSSYTMTKTGTLPNTVSKLDTGYSCEARNVGYRCPGKRMQVDDLNIS 238
QY 217 GIITAAVVVALVISVCGLVGYCAQRKGYSKETSFKSNSSSSKATTMSEN 266
DB 239 GIITAAVVVALVISVCGLVGYCAQRKGYSKETSFKSNSSSSKATTMSEN 288
RESULT 9
US-09-909-0898-64
Sequence 64, Application US/09909088B
Patent No. US20020146709A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnovers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kijavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/909,088B
PRIOR FILING DATE: 2001-07-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29

; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-909-088B-64

Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVFVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVFVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 97 QNLEEDTTLVLVAPVPSCVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

Qy 157 PRLGQSSTNSSTMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRRCPCGRMQVDDLNIS 216
Db 179 PRLGQSSTNSSTMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRRCPCGRMQVDDLNIS 238

Qy 217 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKNSSSSKATTMSN 266
Db 239 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKNSSSSKATTMSN 288

RESULT 10
US-09-905-291A-64
; Sequence 64, Application US/09905291A
; Patent No. US20020160374A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas P.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic

; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/905,291A
; CURRENT FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-905-291A-64

Query Match 83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 37 SRLEWKKLGRSVFVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVFVYQOTLQDGFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

Qy 97 QNLEEDTTLVLVAPVPSCVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCVPSSALSCTVVELRCQDKEGNPAPEYTWFKDGIRLLEN 178

Qy 157 PRLGQSSTNSSTMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRRCPCGRMQVDDLNIS 216
Db 179 PRLGQSSTNSSTMTKTGTQLQFNTVSKLDTGEYSCEARNSVGYRRCPCGRMQVDDLNIS 238

Qy 217 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKNSSSSKATTMSN 266
Db 239 GIIAAVVVALVISVCGLGVCYAQRKGYSKETSFKNSSSSKATTMSN 288

RESULT 11
US-09-953-499-9
; Sequence 9, Application US/09953499
; Publication No. US20020182206A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi J.

```
; APPLICANT: Fong, Sherman
; APPLICANT: Goddard, Audrey
; APPLICANT: Gurney, Austin L.
; APPLICANT: Napier, Mary A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT
; OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS
; FILE REFERENCE: P1216R1(US)
; CURRENT APPLICATION NUMBER: US/09/953,499
; CURRENT FILING DATE: 2001-09-14
; PRIOR APPLICATION NUMBER: US/09/254,465
; PRIOR FILING DATE: 1999-03-05
; PRIOR APPLICATION NUMBER: PCT/US98/24855
; PRIOR FILING DATE: 1998-11-20
; PRIOR APPLICATION NUMBER: US 60/066,364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: US 60/078,936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: PCT/US98/19437
; PRIOR FILING DATE: 1998-09-17
; NUMBER OF SEQ ID NOS: 30
; SEQ ID NO 9
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-953-499-9

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 97 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFDGIRLLEN 178

QY 157 PRLGSQSTNSSYTNMTKTGLQFNFTVSKLDTGEYSCEARNVGYRRCPCPKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSYTNMTKTGLQFNFTVSKLDTGEYSCEARNVGYRRCPCPKRMQVDDLNIS 238

QY 217 GIIAAVVVVVALVISVCGLGVCYQAQRKGYSKETSFKQNSSSSKATTMSN 266
Db 239 GIIAAVVVVVALVISVCGLGVCYQAQRKGYSKETSFKQNSSSSKATTMSN 288

RESULT 12
US-09-902-853-64
; Sequence 64, Application US/09902853
; Publication No. US20020192659A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James

; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; ACIDS ENCODING THE SAME
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/902,853
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: US/09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-902-853-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVFVYQOTLQGDFFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118

QY 97 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDKEGNPAPEYTFWFDGIRLLEN 178

QY 157 PRLGSQSTNSSYTNMTKTGLQFNFTVSKLDTGEYSCEARNVGYRRCPCPKRMQVDDLNIS 216
Db 179 PRLGSQSTNSSYTNMTKTGLQFNFTVSKLDTGEYSCEARNVGYRRCPCPKRMQVDDLNIS 238

QY 217 GIIAAVVVVVALVISVCGLGVCYQAQRKGYSKETSFKQNSSSSKATTMSN 266
Db 239 GIIAAVVVVVALVISVCGLGVCYQAQRKGYSKETSFKQNSSSSKATTMSN 288
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RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

RESULT 14
US-09-907-841-64
; Sequence 64, Application US/09907841
; Publication No. US20020198366A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,841
; CURRENT FILING DATE: 2001-11-20
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64

; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-907-824-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
Db 59 SRLEWKKLGRSVSFVYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
QY 97 QNLEEDTTLVLVAPVPSCVPPSSALSGTIVVLRQDKEGPNAPPEYTFWKDGIRLLEN 156
Db 119 QNLEEDTTLVLVAPVPSCVPPSSALSGTIVVLRQDKEGPNAPPEYTFWKDGIRLLEN 178
QY 157 PRIGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGVRRCPGKRMQVDDLNIS 216
Db 179 PRIGSQSTNSSYTMNTKTGTLOFNTVSKLDTGEYSCEARNVGVRRCPGKRMQVDDLNIS 238
QY 217 GIIAAVVVALVISVCGLGVCYAOQKGYESKETSFOKSNSSSKATTMSSEN 266
Db 239 GIIAAVVVALVISVCGLGVCYAOQKGYESKETSFOKSNSSSKATTMSSEN 288

RESULT 13
US-09-907-824-64
; Sequence 64, Application US/09907824
; Publication No. US20020197671A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/907,824
; CURRENT FILING DATE: 2001-07-17
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
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; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-907-841-64

Query Match      83.3%; Score 230; DB 10; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 96
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118

QY 97 ONLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDEKGNPAPEYTWFKDGIIRLLEN 156
Db 119 ONLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDEKGNPAPEYTWFKDGIIRLLEN 178

QY 157 PRLGSGSTNSSTYMTNTKTGTLQFNVTNSKLDTGCEYSCAARNVGYRRCPCGRMQVDDNLIS 216
Db 179 PRLGSGSTNSSTYMTNTKTGTLQFNVTNSKLDTGCEYSCAARNVGYRRCPCGRMQVDDNLIS 238

QY 217 GIIAAVVVVALVISVGLGVCYCAQRKGYSKETSFOKSNSSSKATTMSN 266
Db 239 GIIAAVVVVALVISVGLGVCYCAQRKGYSKETSFOKSNSSSKATTMSN 288

RESULT 15
US-09-904-011-64
; Sequence 64, Application US/09904011
; Publication No. US2003000350A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,011
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: 09/665,350
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; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
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; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
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; PRIOR APPLICATION NUMBER: PCT/US99/21547
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; PRIOR APPLICATION NUMBER: PCT/US99/28214
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; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 64
; LENGTH: 312
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-64

Query Match      83.3%; Score 230; DB 11; Length 312;
Best Local Similarity 100.0%; Pred. No. 6.1e-217;
Matches 230; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 37 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 96
Db 59 SRLEWKKLGRSVSFVYYQQTLOGDFKNRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEOG 118

QY 97 ONLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDEKGNPAPEYTWFKDGIIRLLEN 156
Db 119 ONLEEDTTLVLVAPVAPVPSCEVPSSALSGTVELRCQDEKGNPAPEYTWFKDGIIRLLEN 178

QY 157 PRLGSGSTNSSTYMTNTKTGTLQFNVTNSKLDTGCEYSCAARNVGYRRCPCGRMQVDDNLIS 216
Db 179 PRLGSGSTNSSTYMTNTKTGTLQFNVTNSKLDTGCEYSCAARNVGYRRCPCGRMQVDDNLIS 238

QY 217 GIIAAVVVVALVISVGLGVCYCAQRKGYSKETSFOKSNSSSKATTMSN 266
Db 239 GIIAAVVVVALVISVGLGVCYCAQRKGYSKETSFOKSNSSSKATTMSN 288

Search completed: December 9, 2003, 17:34:16
Job time : 26.4843 secs
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:21:03 ; Search time 13.4634 Seconds
(without alignments)
1971.458 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298
Perfect score: 276
Sequence: 1 YHKAYGFSAPKQQVTVAX.....SSKATTMSSEDFKTKSFII 276

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 283308 seqs, 96168682 residues

Word size : 50

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : PIR 76:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
---------------	-------	----------------	--------	-------	-------------

No matches found

Search completed: December 9, 2003, 17:25:56
Job time : 13.4634 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:14:27 ; Search time 9.61672 Seconds
(without alignments)
1349.666 Million cell updates/sec

Title: US-09-852-797-76_COPY23_298

Perfect score: 276

Sequence: 1 YHKAYGFSAPKQDVVTVX.....SSKATTMSNDPKTKSFII 276

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 127863 seqs, 47026705 residues

Word size: 50

Total number of hits satisfying chosen parameters: 1

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database: SwissProt_41.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	240	87.0	298	1 JAM2_HUMAN	P57087 homo sapien

ALIGNMENTS

RESULT 1
JAM2_HUMAN
ID JAM2_HUMAN STANDARD; PRT; 298 AA.
AC P57087;
DT 16-OCT-2001 (Rel. 40, Created)
DT 16-OCT-2001 (Rel. 40, Last sequence update)
DT 15-SEP-2003 (Rel. 42, Last annotation update)
DE Junctional adhesion molecule 2 precursor (Vascular endothelial
DE junction-associated molecule) (VE-JAM).
GN JAM2 OR VEJAM OR C21ORF43.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBITaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Vascular endothelial cells;
RX MEDLINE=20317114; PubMed=10779521;
RA Palmeri D., van Zante A., Huang C.C., Hemmerich S., Rosen S.D.;
RT "Vascular endothelial junction-associated molecule, a novel member of
RT the immunoglobulin superfamily, is localized to intercellular
RT boundaries of endothelial cells.";
RL J. Biol. Chem. 275:19139-19145(2000).
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=Placenta;
RX MEDLINE=20507930; PubMed=10945976;

RA Cunningham S.A., Arrate M.P., Rodriguez J.M., Bjerket R.J.,
RA Vanderslice P., Morris A.P., Brock T.A.;
RT "A novel protein with homology to the junctional adhesion molecule:
RT Characterization of leukocyte interactions.";
RL J. Biol. Chem. 275:34750-34756(2000).
RN [3]
RP SEQUENCE FROM N.A.
RC TISSUE=Lung;
RX MEDLINE=22388957; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh P.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Donald M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Udwin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalish D.E.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [4]
RP FUNCTION: MAY PLAY A ROLE IN THE PROCESSES OF LYMPHOCYTE HOMING TO
CC SECONDARY LYMPHOID ORGANS.
CC -!- SUBCELLULAR LOCATION: Type I membrane protein (potential).
CC -!- TISSUE SPECIFICITY: PROMINENTLY EXPRESSED ON HIGH ENDOTHELIAL
CC VENULES BUT IS ALSO PRESENT ON THE ENDOTHELIA OF OTHER VESSELS.
CC LOCALIZED TO THE INTERCELLULAR BOUNDARIES OF HIGH ENDOTHELIAL
CC CELLS.
CC -!- SIMILARITY: BELONGS TO THE IMMUNOGLOBULIN SUPERFAMILY.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -!- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC -!- DATABASE: NAME=PROW; NOTE=PROW 2:1-3(2001);
CC WWW="http://www.ncbi.nlm.nih.gov/prov/guide/1652492186.g.htm".
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; AF255910; AAF81223.1; -;
CC EMBL; AY016009; AAG49022.1; -;
CC EMBL; BC017779; AAH17779.1; -;
CC Genew; HGNC:14686; JAM2.
CC MIM; 606870; -;
CC GO; GO:0005887; C:integral to plasma membrane; NAS.
CC GO; GO:0016337; P:cell-cell adhesion; NAS.
CC InterPro; IPR007110; IG-like.
CC InterPro; IPR003598; IG C2.
CC InterPro; IPR003006; IG_MHC.
CC Pfam; PF00047; ig; 2.
CC SMART; SM00408; IGC2; 1.
CC PROSITE; PS50835; IG_Like; 2.
CC Immunoglobulin domain; Glycoprotein; Transmembrane; Signal.
CC SIGNAL 1 20 POTENTIAL.
CC CHAIN 21 298 JUNCTIONAL ADHESION MOLECULE 2.
CC DOMAIN 21 238 EXTRACELLULAR (POTENTIAL).
CC TRANSMEM 239 259 POTENTIAL.
CC DOMAIN 260 298 CYTOPLASMIC (POTENTIAL).
CC DOMAIN 32 127 IG-LIKE V-TYPE.
CC DOMAIN 134 238 IG-LIKE C2-TYPE.
CC DISULFID 50 109 POTENTIAL.
CC DISULFID 155 214 POTENTIAL.

FT CARBOHYD 98 98 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 187 187 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 236 236 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 298 AA; 33207 MW; CA78E518E22DCAEE CRC64;
Query Match 87.0%; Score 240; DB 1; Length 298;
Best Local Similarity 100.0%; Pred. No. 1.6e-232;
Matches 240; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 37 SRLEWKKLGRSVSFVYYQOTLQGDFFKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 96
|||
Db 59 SRLEWKKLGRSVSFVYYQOTLQGDFFKRAEMIDFNIRIKNVTRSDAGKYRCEVSAPSEQ 118
|||
QY 97 QNLEEDVTLEVLVAPVSPCEVPSSALSGTVVLELRCQDKEGNPAPEYTWFKDGIRLLEN 156
|||
Db 119 QNLEEDVTLEVLVAPVSPCEVPSSALSGTVVLELRCQDKEGNPAPEYTWFKDGIRLLEN 178
|||
QY 157 PRLGSTNSSTNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 216
|||
Db 179 PRLGSTNSSTNTKTGTLOFNTVSKLDTGEYSCEARNVGYRRCPGKRMQVDDLNIS 238
|||
QY 217 GIIAAVVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFI 276
|||
Db 239 GIIAAVVVVALVISVGLGVCAQRKGYSKETSFOKSNSSSKATTMSNDPKHTKSFI 298
|||

Search completed: December 9, 2003, 17:24:01
Job time : 9.61672 secs

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OM protein - protein search, using sw model

Run on: December 9, 2003, 17:20:17 ; Search time 29.8118 Seconds
(without alignments)
2389.068 Million cell updates/sec

Title: US-09-852-797-76_COPY_23_298

Perfect score: 276

Sequence: 1 YHKAYGFSAPKQQQVTVAVX.....SSKATTMSENDFKHTKSFII 276

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 830525 seqs, 258052604 residues

Word size: 50

Total number of hits satisfying chosen parameters: 0

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database :

SPTREMBL 23.*

1: sp_archaea.*

2: sp_bacteria.*

3: sp_fungi.*

4: sp_human.*

5: sp_invertebrate.*

6: sp_mammal.*

7: sp_mhc.*

8: sp_organelle.*

9: sp_phage.*

10: sp_plant.*

11: sp_rodent.*

12: sp_virus.*

13: sp_vertebrate.*

14: sp_unclassified.*

15: sp_rvirus.*

16: sp_bacteriap.*

17: sp_archheap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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No matches found

Search completed: December 9, 2003, 17:25:15
Job time : 29.8118 secs